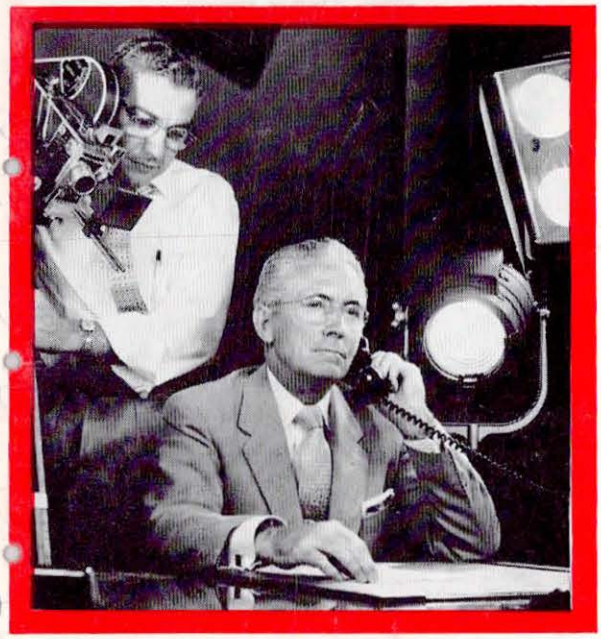
Finding Hot Boxes 71 Miles Away

April 18, 1960

RAILWAY AGE *weekly*



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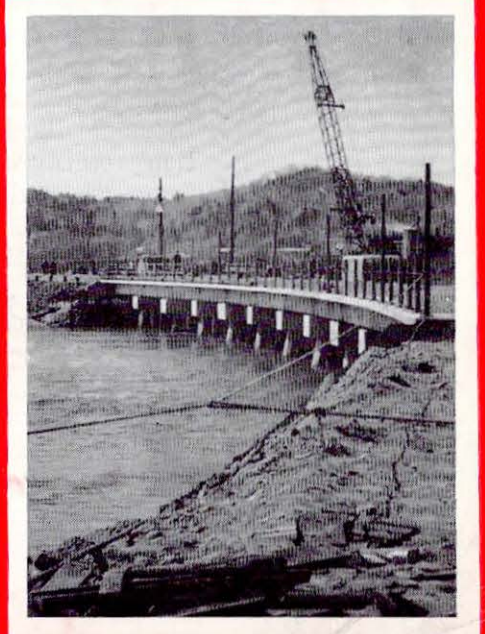
New Haven Rebuilds A Key Bridge

New concrete span ends delays in busy yard



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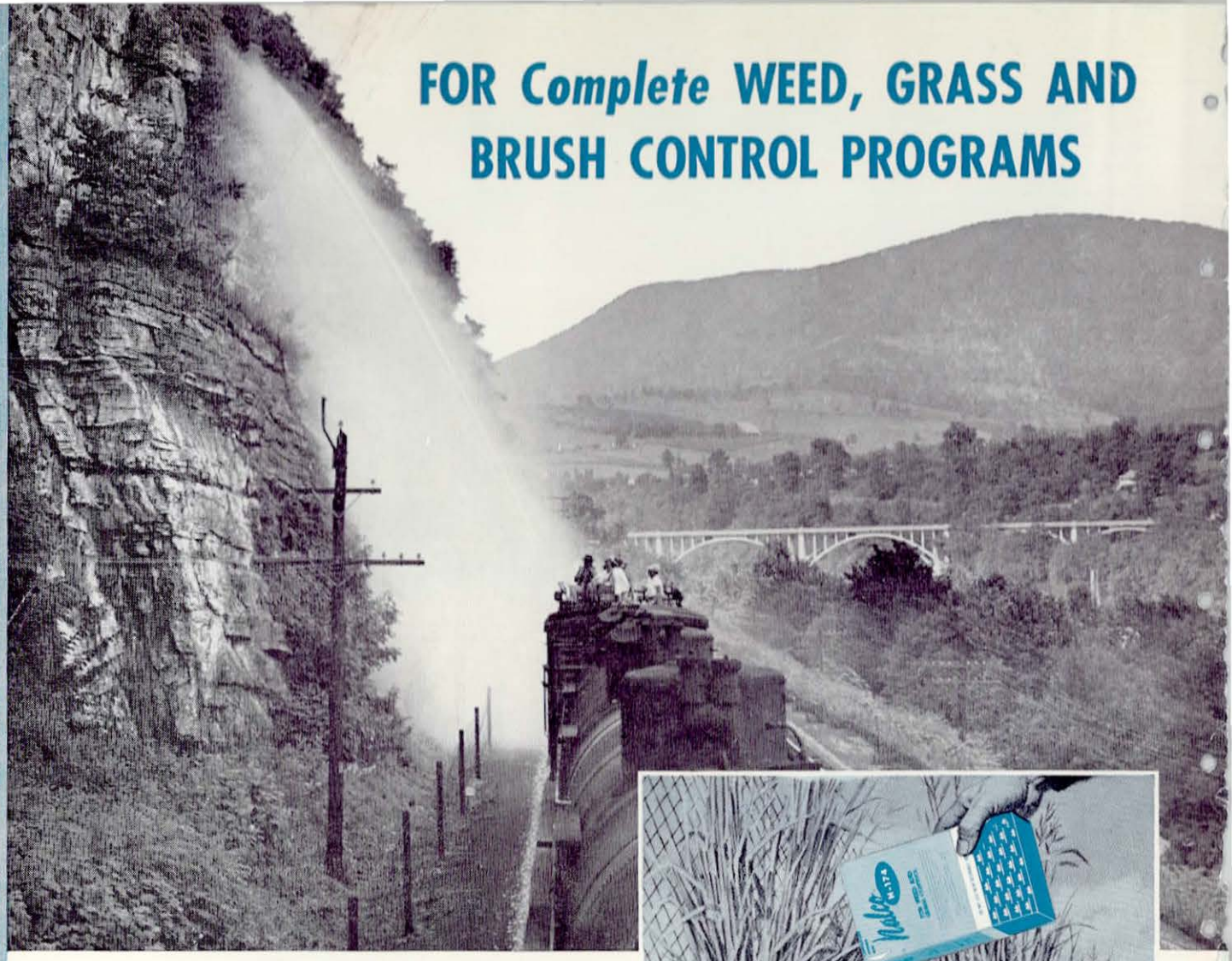

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. . . in storage and yard areas

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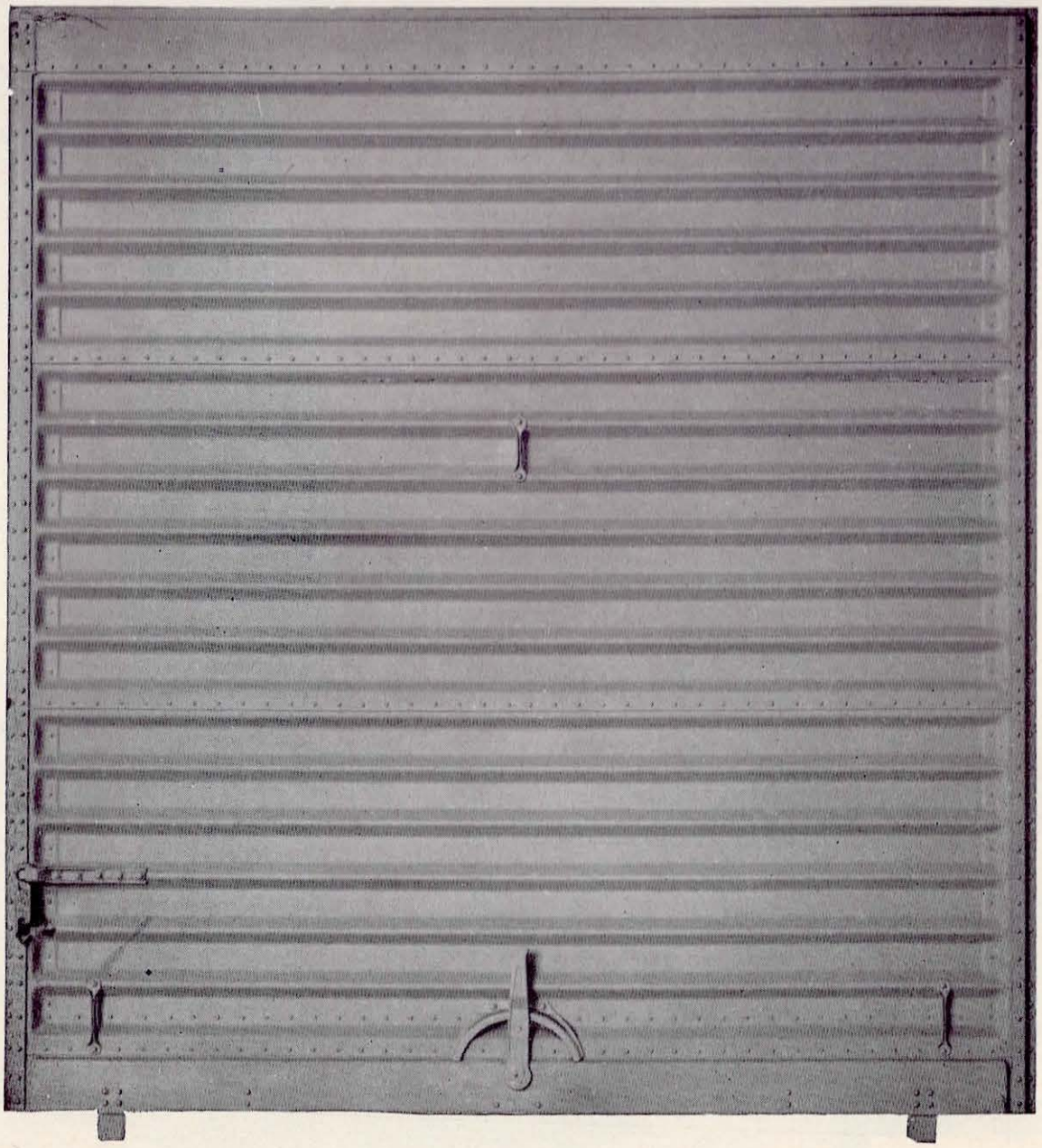

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Southern Pacific is another of America's great railroads that has General American Piggy-Back cars in use and on order to haul freight faster, safer, more economically.

General American's Piggy-Back cars are fastest to load and unload (trailers align automatically); the G-85 is 10,000 pounds lighter than any other Piggy-Back car for greater payload; takes all trailers without modification (no dollies needed). The G-85 needs no expensive loading and unloading equipment. You can mix or match trailers, containers, auto carriers, vans and tanks on the G-85.

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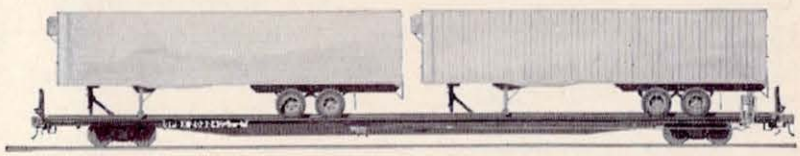

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GENERAL AMERICAN TRANSPORTATION CORPORATION
Piggy-Back Division

135 South LaSalle Street,
Chicago 3, Illinois

Piggy-Back GENERAL AMERICAN TRADE MARK

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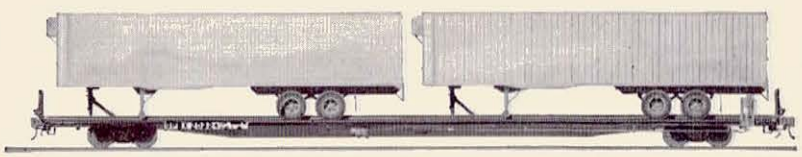

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Week at a Glance CONT.

Current Statistics

Operating revenues	
2 mos., 1960 ...	$1,563,389,022
2 mos., 1959 ...	1,532,213,474
Operating expenses	
2 mos., 1960 ...	1,254,520,883
2 mos., 1959 ...	1,253,755,076
Taxes	
2 mos., 1960 ...	168,158,367
2 mos., 1959 ...	153,091,379
Net railway operating income	
2 mos., 1960 ...	85,713,645
2 mos., 1959 ...	75,670,278
Net income estimated	
2 mos., 1960 ...	55,000,000
2 mos., 1959 ...	42,000,000
Average price railroad stocks	
Apr. 12, 1960 ..	95.24
Apr. 14, 1959 ..	111.03
Carloadings, revenue freight	
13 wks., 1960 ..	7,577,596
13 wks., 1959 ..	7,557,753
Freight cars on order	
March 1, 1960 ..	46,323
March 1, 1959 ..	28,789
Freight cars delivered	
2 mos., 1960 ...	7,900
2 mos., 1959 ...	4,426

●

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F. T. Baker—district manager,
J. C. Lyddy—district manager
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RAndolph 6-0794
J. R. Thompson—vice president,
J. W. Crossett—district manager,
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Cleveland 15, Ohio, 1501 Euclid **ave.,**
MAin 1-4455
H. H. Melville—vice president,
H. M. Blunt—district manager
Pittsburgh 19, Pa., Suite 203, **Carlton House**
GRant 1-8186
C. J. Fisher—district manager
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Dallas 19, Tex., 3908 Lemmon **ave.,**
LAkeside 1-2322—Joseph Sanders
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HUbbard 3-0390
Bayne A. Sparks—vice president
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The Action Page ..... p. 54

Diversify . . . or stagnate—Railroads must keep pace with the times by diversifying their operations. Objections would come only from their competitors, who now enjoy a politically protected monopoly.

Is Mr. Laney out of step?—Mr. Laney, local BLE chairman at Birmingham, says "fireman off" should be accepted as a long-range program. His point of view may well be shared by thousands of his fellow railroad union men.

Short and Significant

February's net income . . . .

of Class I railroads is estimated at $28,000,000—up $6,000,000 from February 1959's $22,000,000, according to the AAR. Estimated net for this year's first two months is $55,000,000, an increase of $13,000,000 above the year-earlier figure. Thirty-seven Class I roads failed to earn their fixed charges in this year's first two months. Rate of return for the 12 months ended with February averaged 2.76%.

All-piggyback through train service . . .

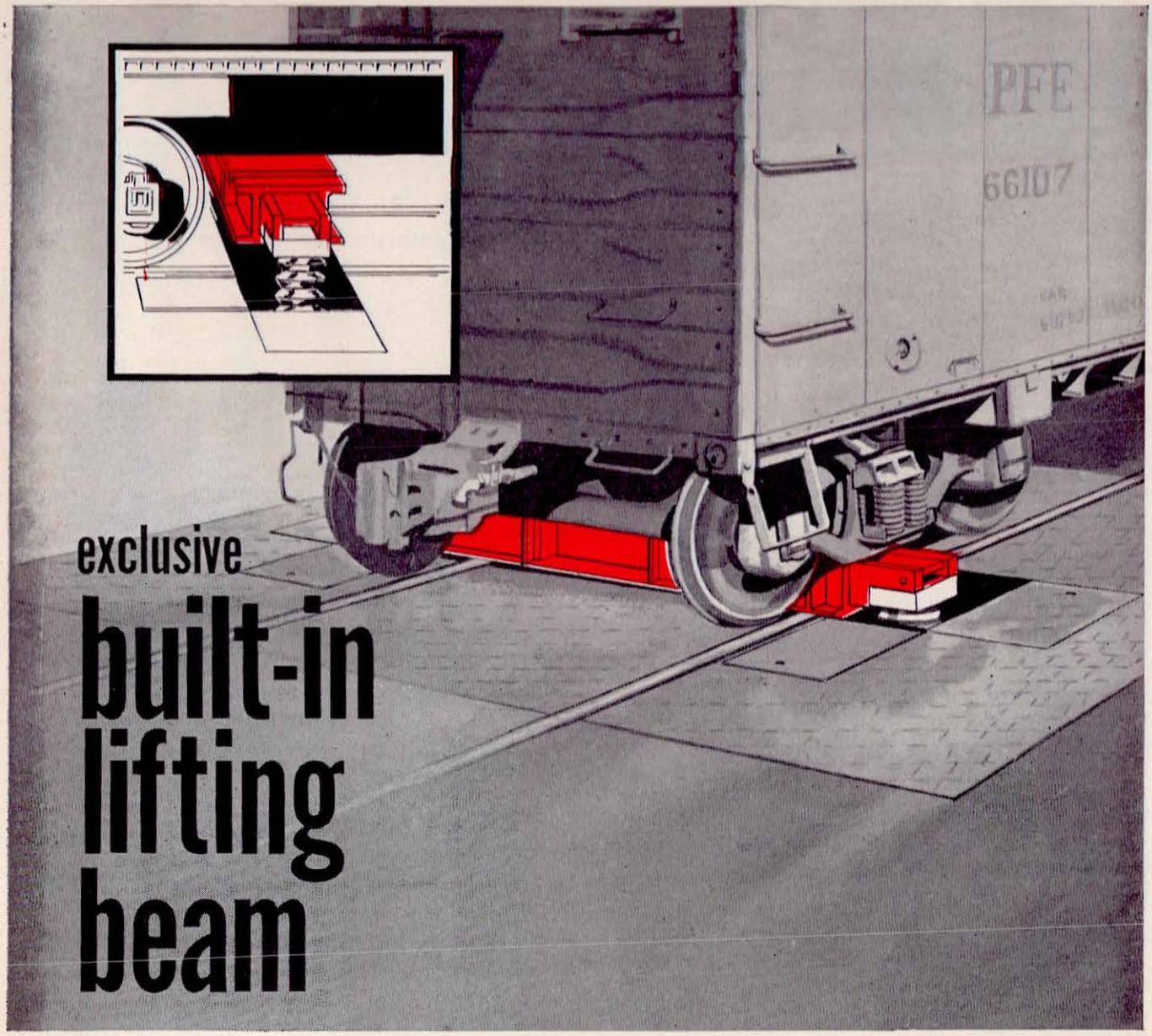
between Buffalo and Chicago—via southern Ontario, Detroit and Grand Rapids, Mich.—was inaugurated last week by C&O. Fourteen motor carriers are participating in the new Plan I service.

The BLE got down to statistics . . . .

last week in its effort to prove a case for a wage increase. Brotherhood testimony before the arbitration board was intended to show that worker productivity has increased, but wages have not kept pace with rises in compensation in other industries.

A National User Charge Commission . . .

to create and administer a program whereby commercial carriers would pay fully for their use of government-provided transport facilities has been proposed by the AAR. The proposal was made to the Senate Commerce Committee's transport study group. It is the second of four special papers which the association is submitting to the group along with its general presentation calling for removal of all inequities in the federal regulatory setup. First of the special papers calls for repeal, or extension to railroads, of the so-called bulk-commodity exemption which leaves water transportation of commodities in bulk unregulated (RA, April 11, p. 39).



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Built-in lifting beam on the Whiting Ripjack gives *any* lift push-button efficiency. Fishbelly cars and other specials are no problem . . . no delay. Center-sill or coupler lifts are completed as quickly as standard pad or truck lifts . . . in just seconds!

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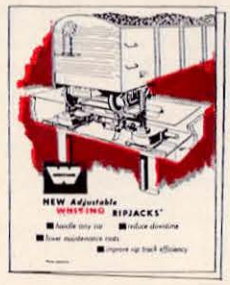

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WORK RULES STUDY is recommended by Labor Secretary Mitchell (foreground) as brotherhood chiefs look on. L. to R., J. A. Paddock, ORC&B; N. P. Speirs, SUNA; H. E. Gilbert, BLF&E; Guy L. Brown, BLE; W. P. Kennedy, BRT.

Featherbedding Fight Draws Fire

► **The Story at a Glance: Secretary of Labor Mitchell and the AAR had differing views last week after the Secretary, in effect, advised the carriers and the brotherhoods to settle their work rules dispute someplace else than at the bargaining table.**

The implication was strong that the industry should adopt a program similar to that by which the steel industry is supposed to dispose of its rules problem—through joint labor-management study, over a period of time and in an atmosphere free of bargaining deadlines.

The AAR, however, came up with the reminder that the carriers suggested appointment of a commission to study the problem more than a year ago. But, they noted, the unions rejected the proposal, Secretary Mitchell didn't endorse it and eventually President Eisenhower rejected the request.

The railroads' efforts to modernize their work rules came under fire twice in two days, at the operating brotherhoods' institute on labor-management problems April 7-8 at the University of Iowa.

Keynoter Guy L. Brown, grand chief of the BLE, led off with an attack on management's method of approach and a plea to labor to overcome its "resentment. . . [and] embark on a course of more thoroughgoing cooperation with railway management."

Then Secretary of Labor Mitchell, principal speaker at the institute, came on. Suggesting that the nation's newspapers are a "very poor place in which to negotiate," Mr. Mitchell proposed that the work rules problem be assigned to study outside the processes of the Railway Labor Act. He hailed the agreement reached in the steel industry, which provides for such a joint labor-management investigation and, in addition, creates a "human relations research" committee.

AAR response was quick and sharp: "We are sorry the Secretary did not hold the same view 14 months ago when the railroads first proposed an impartial presidential commission to study the featherbedding work rules problem which he now says is too big to be settled at the bargaining table."

The Secretary put it this way, in explaining his position:

"The objective of efficient operation of the national economy will not be met by any attempt to change at a stroke or the bang of a gavel work habits built up over many years and through many bargaining sessions. . .

"The objective of a forward, vigorous union movement will not be achieved by seeing in a status quo the answer to every challenge of change. Certainly there are practices in many industries today that are no longer purposeful, and there must be alternatives for them and the people they involve. And I doubt that such alternatives can be devised at a bargaining table, among people faced with a nerve-wracking deadline and in an atmosphere of tension and contention."

Referring specifically to the railroads, Secretary Mitchell commented that many industry problems "cannot—and should not—be solved while both parties are rushing toward a deadline. This industry has benefitted for many years from the provisions of the Railway Labor Act, a law that keeps alive the concept of voluntary action and that has worked reasonably well throughout the years. . . But there are some problems in the industry that can be finally and successfully solved within the framework of good labor-management relations, but outside the law with its sequence of deadlines."

The Secretary said it's possible consideration may be given to modernizing the 34-year old act. This, too, he commented, should be done by labor and management in cooperative fashion.

In addition, he suggested that labor and management might want to look together at the "antiquated regulatory powers of the ICC." In order to produce a healthy industry, he said, the nation will "have to abandon archaic regulation. . . which government has foisted on the industry" and labor and management could "bring a joint voice to bear on this."

Earlier, BLE Chief Brown had called for labor support for similar action. In a deft mixture of militancy and states-

(Continued on page 16)

Midwest Transportation Map

► **The Story at a Glance: Merger-minded railroads are in the process of redrawing the transportation map of the upper Midwest. With only one or two exceptions, every major road operating west and northwest out of Chicago is in one stage or another of merger and merger study. The trend is even more pronounced at Minneapolis-St. Paul.**

If every consolidation makes it from study through to actuality, six major systems will be operating in territory now served principally by about a dozen roads.

This year could be the one in which railroad consolidation ceases to be a novelty. N&W and Virginian have already made it to the altar. An Erie-Lackawanna union has an ICC examiner's blessing. Santa Fe and PRR have assumed control of TP&W. Soo-Wisconsin Central-DSS&A are steaming toward merger with little expectation of trouble.

Perhaps most significantly, there's more than a hint of action on three major midwestern consolidations this year.

C&NW's purchase of M&StL (RA, April 11, p. 7) goes before the stockholders of both roads in separate special meetings set for June 28.

Full-scale engineering, legal and financial studies of Rock Island-Milwaukee merger are expected to be completed later this year.

And, according to Great Northern, something definite may develop this year in the long-studied GN-NP-CB&Q-SP&S consolidation. Terms of exchange got a thorough probing last year. It's "regretted that progress has been slow," GN comments, "but the problems involved are complex. Tangible results are hoped for in 1960 since, in addition to the long-standing joint interests of the lines, the opportunities for economies and improved service make consolidation very desirable."

In other areas, merger of ACL and Seaboard is still an active issue; consolidation (in some manner) of major New England roads rates attention; N&W-Nickel Plate marriage may be decided by year's end; and C&EI is still apparently under study by MoPac.

Most of the attention last week, however, focused on directors' approval of the purchase of M&StL by North Western. If stockholders and the ICC approve, C&NW will buy the smaller road for $20,929,920—$3,488,320 in cash to be paid at closing and $17,441,600 in assumed liability on 6% mortgage bonds to be newly created by M&StL on its properties. North West-

Watching Washington *with Walter Taft*

• **A WAGE INCREASE** of one cent per hour, effective May 1, now seems in prospect for railroad employees working under agreements with escalator clauses. Though current wage movements have been under way since last November, the escalators of the old contracts are still in operation. That's because the contracts are on the usual pattern, having provisions which keep them fully in effect until successor agreements take over.

THE ESCALATOR CLAUSES are tied to the Bureau of Labor Statistics' cost-of-living index. The September 1956 index of 117.1 is the base, and up or down adjustments of one cent per hour are required for each half-point change from that figure.

THE MAY 1 ADJUSTMENT will be determined by March's index, due the latter part of this week or shortly thereafter. It is not expected to be much different from February's 125.6. That would put it 8.5 points above the 117.1 base and thus build up the escalator-clause increases to 17 cents per hour, i.e., one cent in addition to the 16 cents already provided by five previous increases.

UPWARD MOVEMENT of one-half point from this February figure would call for a raise of two cents per hour. On the other hand, no raise would be due if there were a downward movement of as much as one-tenth of a point. To provide a one-cent cut, however, the drop would have to be six-tenths of a point—to 125.0.

• **RECOMMENDATIONS** of the transport study made in the Department of Commerce comprise what Commerce's undersecretary for transportation calls a program "to solve long-standing problems, or to reconcile conflicting interests." That's what the undersecretary, John J. Allen, Jr., said in an Oakland, Calif., address last week.

A REPORT ON THE STUDY, with 78 recommendations, was submitted to President Eisenhower by Secretary of Commerce Mueller last month (RA, March 21, p. 31). The President had asked that the study be made, but failed to endorse the recommendations when he sent the report to Congress and other interested government agencies.

UNDERSECRETARY ALLEN'S SPEECH at Oakland was his first comprehensive public discussion of the report and its recommendations. Many of the latter are controversial, such as the calls for more carrier rate-making freedom and for user charges on publicly-provided transport facilities.

HEADING INTO SUCH ISSUES, Mr. Allen said, framers of the report were not unaware of the theory that decisions on public policy should be made by getting rival interests together and reaching a consensus of their positions. Rejecting that approach, "we based our thinking on the public interest," the undersecretary explained.

Changing

ern is purchasing all property, equipment and assets of M&StL and not the corporation itself. M&StL will continue as a corporate entity, with a different corporate name.

Comment at M&StL's annual meeting April 12 indicated that the company will seek to purchase an established business or work out a merger. It's reported that sale of rail operations will produce a tax loss leading to a cash recovery of about $3,000,000 if the sale is completed in 1960. The sale also would produce a tax loss carryover estimated at between $20,000,000 and $30,000,000.

'Homecoming' for Heineman

It will be, in a sense, homecoming for C&NW Chairman Ben W. Heineman, whose real debut in railroading came in May 1954 when he led a successful proxy fight for control of M&StL. As chairman of the executive committee, he headed M&StL until 1956, then moved in as chairman of C&NW. Present M&StL executive committee chairman is Max Swiren, former law partner of Mr. Heineman in Chicago.

M&StL reflects a number of Heineman innovations—and the purchase by North Western reflects a comment made by Mr. Heineman early in his tenure with M&StL: "The possibility of merger," he said then, "is very much on our minds" (RA, June 28, 1954, p. 65).

Top-level M&StL personnel also has undergone considerable change over the past six years. Three of the top six officers—President A. W. Schroeder, Vice President — Operations W. P. Coliton and Vice President — Traffic J. R. Sullivan—all joined the company after 1954.

Present plans call for C&NW to absorb M&StL and operate its lines as a separate division, probably under the M&StL designation.

Combination of the two roads will bring together two carriers which have started down the consolidation road before—and never completed the trip, so far as a major merger is concerned.

North Western and Milwaukee were once deeply involved in consolidation talks, but studies were dropped after Mr. Heineman came to C&NW. M&StL was also linked, in a preliminary sort of way, with Milwaukee. But M&StL's big effort came in its unsuccessful bid to acquire control of Toledo, Peoria & Western.The road took its case all the way to the U. S. Supreme Court and lost, and TP&W is now the property of Santa Fe and Pennsylvania.

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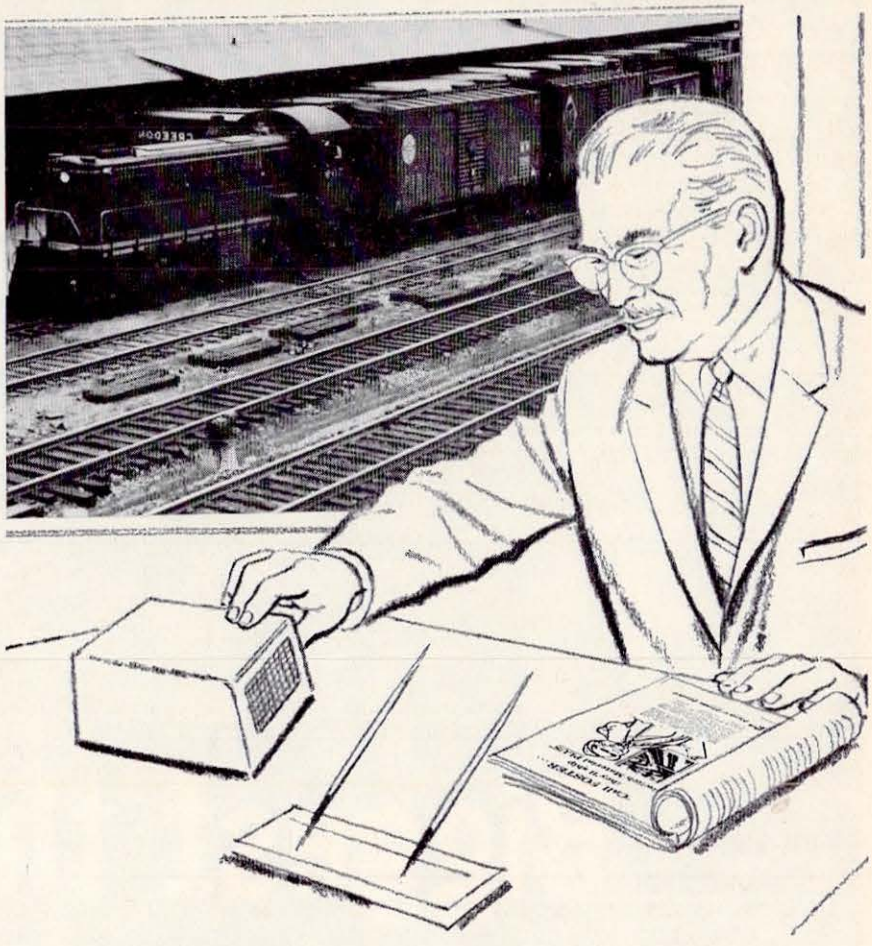

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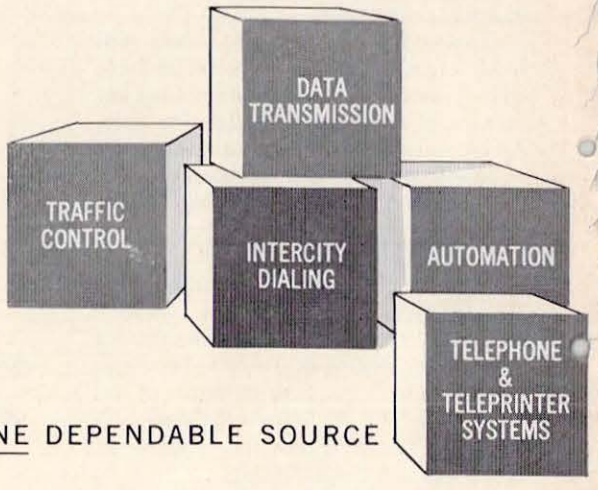

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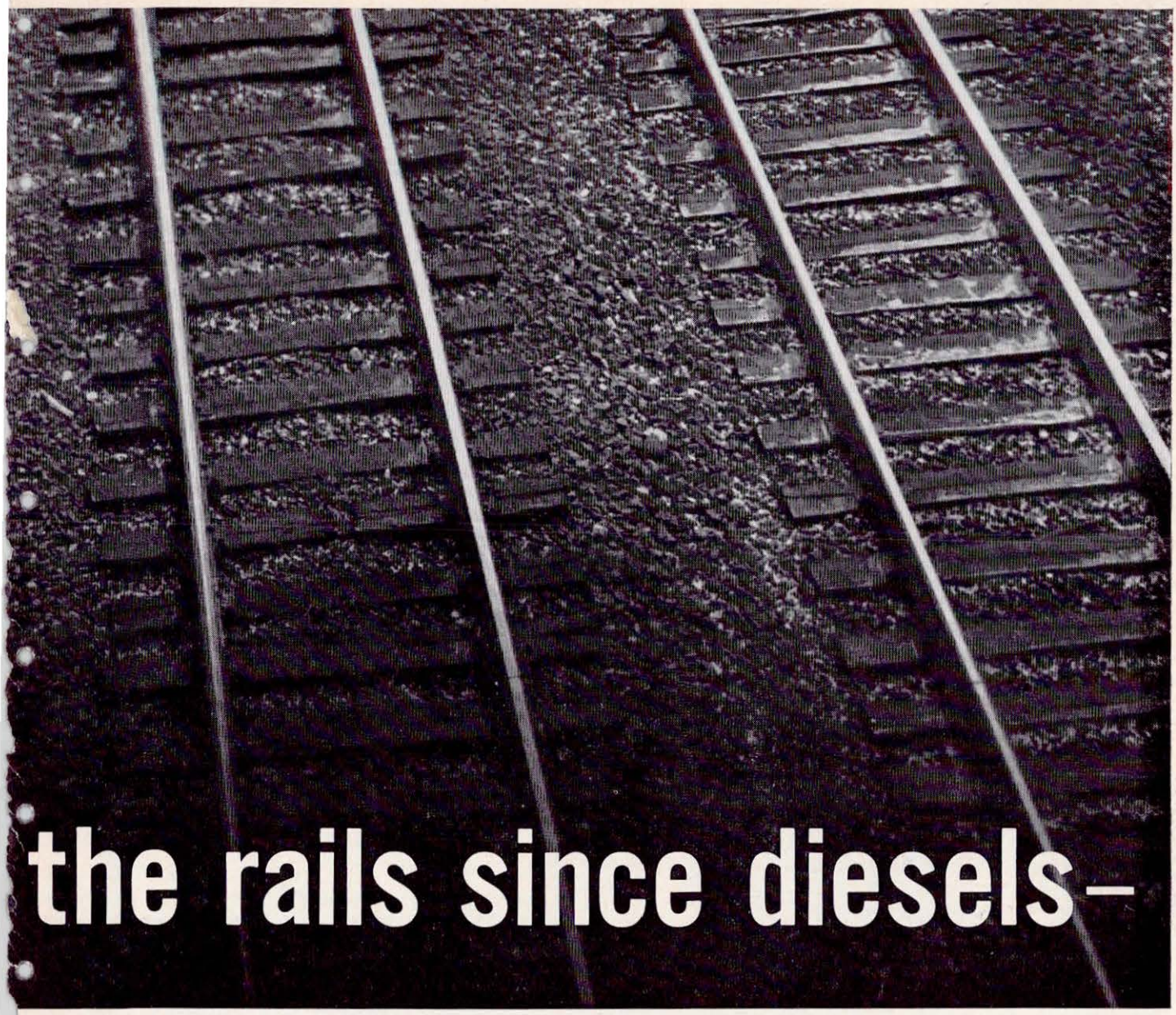

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How Movies Can Boost

► **The Story at a Glance: Photography is getting new emphasis from industry generally. Managements are finding visual presentations—especially motion pictures or film strips or slides—succeed where words alone sometimes fail.**

Industrial photography on railroads isn't new, but it isn't widely recognized as an all-department tool either. Here's how one road—the Frisco—has developed a professional photo staff to cover a wide range of activities. Here, too, are some of the approaches other major film users are taking—and a few of the ideas railroad photographers talk about when the conversation swings to future uses of film.

Frisco's public relations department doesn't look like a Hollywood-type operation—but PR-produced motion pictures are a significant part of the department's service to the railroad.

The staff is small, but it's developed along unique lines: All three members are professional photographers, skilled with both still and motion picture cameras. Staff work ranges from dramatic sales promotion films to highly technical industrial photography.

In the past year Frisco has produced striking motion pictures of both types: color films telling the story of new-automobile piggyback; and a black-and-white tech film, shot with an ultra-high-speed camera, to show precisely what happens inside a freight car journal box under varying impact conditions.

Frisco PR cameramen were part of the scene throughout development of the new-car TOFC business (and Frisco itself was one of the first roads to offer the service). They filmed test runs, followed up with a film of the first St. Louis-Dallas movement and capped the assignment with another and longer motion picture on the complete run.

First films gave the road the answers it wanted regarding quality of the ride the new autos would get. Later films provided a graphic sales tool, useful in selling manufacturers on the advantages of shipping new cars via piggyback. (The department also turned out photo reproductions of impact recorder tests comparing quality of ride in both TOFC and over-the-road movement.)

Some of Frisco's technical photography is just as dramatic as the sales promotion work—for example, the 30-minute black-and-white micromotion film on journal impacts.

Cameramen exposed 7,810 ft of film in four days' shooting, then edited it down to 1,080 ft of finished film. They came up with perhaps the most revealing study yet of impact on journals

FILM EDITING plays an important role in making sure final prints do an effective job.

equipped with stops and various types of lubricator pads. The job was one of the few on which PR had to supplement its own photographic equipment. The department rented a motor-driven Fastax 16mm camera and shot the impacts at 2,000 pictures per second (each picture is slightly smaller than a 16mm frame).

For most work, however, Frisco PR men can come up with their own equipment. Their gear includes two 16mm motion picture cameras, a motor-driven Cine Special and a Bell & Howell; two 4x5 Speed Graphics; one 4x5 view camera; one Rolleiflex twin-lens reflex; and one 35mm Exacta. Fixed facilities (at the road's St. Louis offices) include a print room, process room, studio and editing facilities. Motion picture film processing and sound work are contracted out.

Perhaps the biggest job the department has undertaken is a 25-minute, fully-narrated color film on loss and damage prevention, completed several years ago and since shown to SLSF employees and shippers throughout the territory.

Frisco spared no effort to make the film realistic. It lifted the roof from a new box car, then shot down into the car to show the effect of impact on a load. It impacted a grain box car, then zoomed in on the door area to show grain spilling onto the right-of-way. To demonstrate the force of a 10-mph impact, it sent a box car through a brick wall built across track.

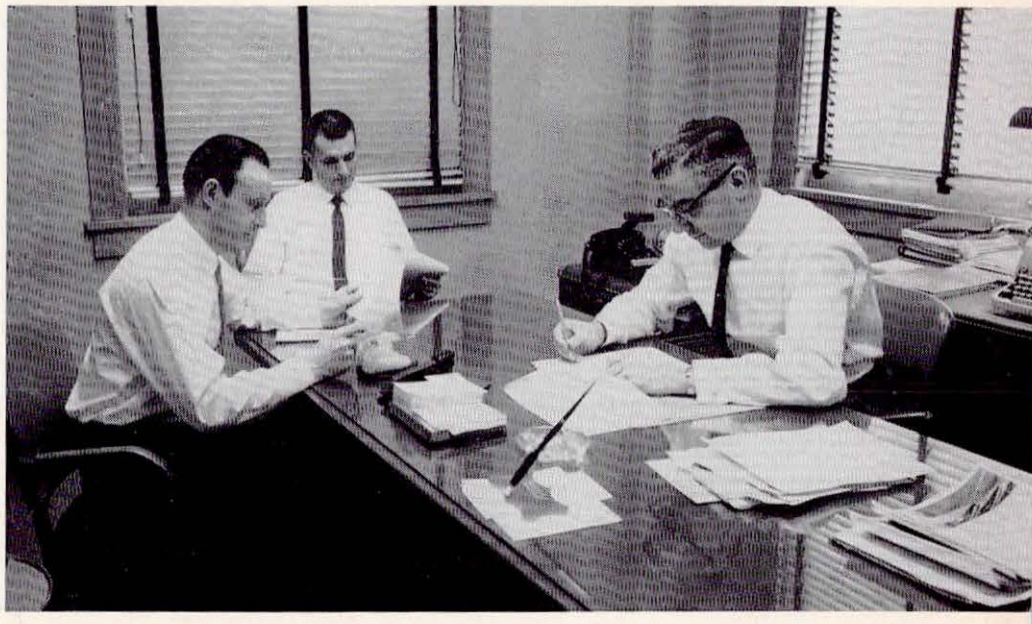
Cost Saving Is Substantial

Even with the added cost of the special effects, the PR department estimates it produced the film for about half the direct cost of outside production. The same spread, PR representative B. J. Gaia indicates, would hold true on most of the staff's work.

In addition to the traffic, mechanical and loss and damage prevention films, Frisco's staff has also:

- Handled all the audio-visual needs of supervisory training classes—10x10 Viewgraph projection prints and 35mm slides.
- Made an instructional slide presentation with tape narration on the road's operating rulebook.
- Produced a film designed to orient

(*Continued on page 51*)



PLANNING A SCENE in advance of location filming is subject of this conference by Frisco Public Relation Representative B. J. Gaia (right), and photographers Clarence Berger (left), and Paul Sweet.

New Uses Ahead for Railroad Films?

Mixing the imaginative with the practical, railroad photographers look for new and expanded use of films:

- For presentation of an annual report. The film could be screened at stockholders meetings, shown throughout the territory and maintained as a graphic file of the road's development year by year.
- To promote industrial development by showing, via both aerial and ground shots, the pattern of development in an area or state, the land still available and relationship of sites to transportation facilities and utilities. One of the newest films in the field: Southern Pacific's "Industry on the Right Track," a 20-minute sound-and-color motion picture which tells how SP works with communities and industries in ID efforts.
- To help construct a more favorable corporate image through external-audience films showing what the company is, does and stands for.
- To put across a point of view—applicable perhaps to local-level public opinion development on legislative, regulatory or labor matters.
- For training purposes. Technological developments—new CTC, a new yard, new specialized cars or motive power—could be explained visually to (a) employees who will use or service the new equipment or facility; and (b) others in the company who may be affected less directly by its use.

Union Demands Top Carriers' Net

Take the entire net income for Class I roads last year, add another $187,326,660 and you'll have enough to pay the cost—for one year—of the brotherhood demands now pending.

The carriers estimate the total calculable cost of the proposals at $765,641,000—about $1,010 per employee. It's more than the railroads have earned in any of the past three years.

Here's a breakdown on specific costs, by organization:

1. SUNA, 12% wage increase	$ 5,783,000
2. BLE, 12% wage increase	41,591,000
3. ORC&B, 1.6% increase in average basic daily rates in effect October 1956 and 12% increase in rates so adjusted	18,215,000
4. BRT, 14% wage increase and holiday pay adjustments for yard service employees	115,800 000
5. Non-operating group, increased vacation benefits and holiday pay	98,386,000
6. BLF&E, 14% wage increase (daily earnings minima demand not calculable)	45,744,000
7. Non-operating group, extended hospital, medical, surgical insurance benefits for employees and dependents, free life insurance, 25-cent hourly wage increase (includes similar demands by United Transport Service Workers; extended hospital, medical, surgical insurance benefits for furloughed employees not calculable)	365,926,000
8. ARSA, $50 per month increase, plus increases in vacation benefits and holiday pay, free life insurance, added medical expense insurance, bonuses, supplemental pensions and disability benefits	Not calculable
9. RYA, $50 per month increase, plus increases in vacation benefits and holiday pay (cost of supplemental sickness insurance not calculable)	4,580,000
10. SUNA, free life insurance, increases in vacation benefits and holiday pay, shift differentials (sick leave benefits, revision of overtime rule, pay for jury duty and attending examinations and classes not calculable)	3,406,000
11. ATDA, 8% wage increase, extended hospital, medical, surgical insurance benefits for employees and dependents, increases in vacation benefits and holiday pay (extended hospital, medical, surgical insurance benefits for furloughed employees not calculable)	4,102,000
12. Demands for inclusion in basic rates of cost-of-living adjustment of 3 cents per hour effective Nov. 1, 1959	54,473,000
13. Payroll taxes on increase in labor costs	7,635,000
Total calculable costs	**$765,641,000**
Increase in labor costs if extended to cover all employees (126 classes)	**$819,262,000**

FEATHERBEDDING FIGHT

(Continued from page 9)

manship, he lashed management's rules revision approach and then called for "teamwork by railway labor, railway management and government at all levels to preserve and improve our transportation system."

He thinks it's "possible that revision of work rules can still be rescued from the pit into which it was thrown by the 'featherbedding' charges and the carriers' notices of last Nov. 2. . . . There are some sensible and fair-minded people on the other side of the bargaining table. The time may come when they are the dominant force in the industry, when it is their wisdom and counsel which will be listened to and which will shape overall policy.

"The work rules can be revised to put the railroads in a better competitive position if the carriers are willing to recognize and assume their responsibilities to their employees."

Chief Brown dwelt at length on the problems of collective bargaining and termed the carriers' conference committee arrangement "the most basic labor relations problem in the industry. . . This setup over the years has resulted in increasingly greater government encroachment into the field of labor relations so that the present wage-rules structure about which the carriers so loudly complain was primarily shaped by the awards and recommendations of government-appointed boards."

Conference committees, he charged, "have found it more desirable to avoid the responsibility for making a majority decision and have shifted their responsibility to a government board which is then charged with creating chaos in the industry."

Chief Brown also had a charge to level at labor. "In all fairness," he added, "the operating organizations are not blameless in the breakdown of collective bargaining. . . Jurisdictional rivalries have played a large part in permitting this situation to develop."

Working sessions at the institute took up most of two days. Among the highlights: A panel with Q&A from the audience directed at the five chiefs (BLE's Brown, BLF&E's H. E. Gilbert, BRT's W. P. Kennedy, ORC&B's J. A. Paddock, SUNA's N. P. Speirs) and economist Eli Oliver; a second panel featuring the organizations' public relations men (RLEA's Milton Plumb, BLE's Richard Murway, BLF&E's William Loftus, BRT's Lou Corsi); and a discussion of compulsory arbitration and its alternatives by John J. Flagler, program director of the university's Bureau of Labor and Management.

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How $1.4 Billion Was Spent

Purchases of Fuel, Material and Supplies

Railways of Class I—Calendar Years 1959 and 1958

Item	1959	1958
FUEL:		
Bituminous coal	$ 15,659,000	$ 21,411,000
Anthracite coal	2,958,000	3,231,000
Fuel oil—Residual	11,722,000	10,976,000
Fuel oil—Diesel	347,120,000	324,925,000
Gasoline	10,427,000	10,338,000
All other (coke, wood, fuel for illumination)	4,165,000	5,046,000
Total fuel	392,051,000	375,927,000
FOREST PRODUCTS:		
Cross ties (treated and untreated)	43,761,000	39,271,000
Switch & bridge ties (treated & untr.) & timber	13,889,000	11,179,000
Lumber (equipment, rough and finished)	26,238,000	16,880,000
Other forest products	8,724,000	8,425,000
Total forest products	92,612,000	75,755,000
IRON AND STEEL PRODUCTS:		
Steel rail (new and second hand, except scrap)	55,879,000	41,953,000
Wheels, axles and tires	72,590,000	52,052,000
Frogs, switches and crossings and parts of same	23,573,000	14,050,000
Track fastenings, track bolts, spikes, etc.	38,117,000	34,716,000
Iron bridges, turntables & struct. steel, all kinds	4,322,000	7,101,000
Bar iron and steel, spring steel, tool steel, unfabricated rolled shapes, wire netting and chain, except light coil; boiler, firebox, tank, and sheet iron and steel, all kinds	30,850,000	19,120,000
Forgings and pressed steel parts for locomotives	1,111,000	3,264,000
Car forgings, iron and steel, and fabricated or shaped steel, for passenger and freight cars	37,813,000	24,077,000
Flues and tubes for locos. & stationary boilers	468,000	537,000
Bolts, nuts, washers, rivets, lag screws, pins & studs	8,586,000	5,975,000
Springs, helical and elliptical, all kinds for locomotives and cars	5,096,000	3,669,000
Locomotive and car castings, beams, couplers, frames and car roofs	69,110,000	52,112,000
Track and roadway tools, all kinds, including hand and power operated tools, miscellaneous roadway material and fencing. Motor, hand, push and trailer cars, and parts for same	16,420,000	13,852,000
Machinery and repair parts	20,348,000	18,456,000
Pipe, iron and steel, and fittings, all kinds	7,880,000	5,717,000
Hardware, all kinds, including nails	7,587,000	6,460,000
Hand & small machine tools, such as drills, taps, reamers, dies, chasers, including air tools & parts	10,960,000	9,118,000
All other iron and steel products, including pig iron, cast iron water pipe and culvert pipe	8,732,000	8,157,000
Total iron and steel products	419,442,000	320,386,000
MISCELLANEOUS:		
Cement, lime, plaster, bldg. brick & other bldg. matls. except cast iron water pipe and culvert pipe	7,317,000	7,148,000
Lubricating oils and grease; illuminating oils; boiler compound; waste	50,978,000	45,401,000
Non-ferrous metal and non-ferrous metal products	29,869,000	25,895,000
Ballast	19,444,000	16,942,000
Electrical materials including electrical material for Diesel locomotives	49,426,000	43,025,000
Stationery and printing	31,660,000	29,947,000
Commissary supplies for dining cars & restaurants	23,717,000	25,392,000
Rubber and leather goods	8,996,000	6,934,000
Glass, drugs, chemicals, including chemicals for timber treatment; painters' supplies	39,701,000	34,480,000
Arch brick for locomotives	178,000	237,000
Passenger car trimmings	11,888,000	8,510,000
Locomotive, train and station supplies	22,662,000	19,793,000
Interlocking and signal material	37,926,000	32,326,000
Telegraph, telephone and radio material	12,715,000	10,825,000
Air brake material	18,766,000	13,335,000
Standard & spec'l mechanical appliances for locos.	4,525,000	3,638,000
Automotive equip. & supplies, except diesel mat'l.	24,479,000	20,801,000
Diesel material not elsewhere classified	84,295,000	72,869,000
All other miscellaneous purchases	47,497,000	41,051,000
Total miscellaneous purchases	526,039,000	458,549,000
Grand Total	$1,430,144,000	$1,230,617,000

Source: Reports of the carriers to the Bureau of Railway Economics.

BLE Suspends Local Chairman Laney

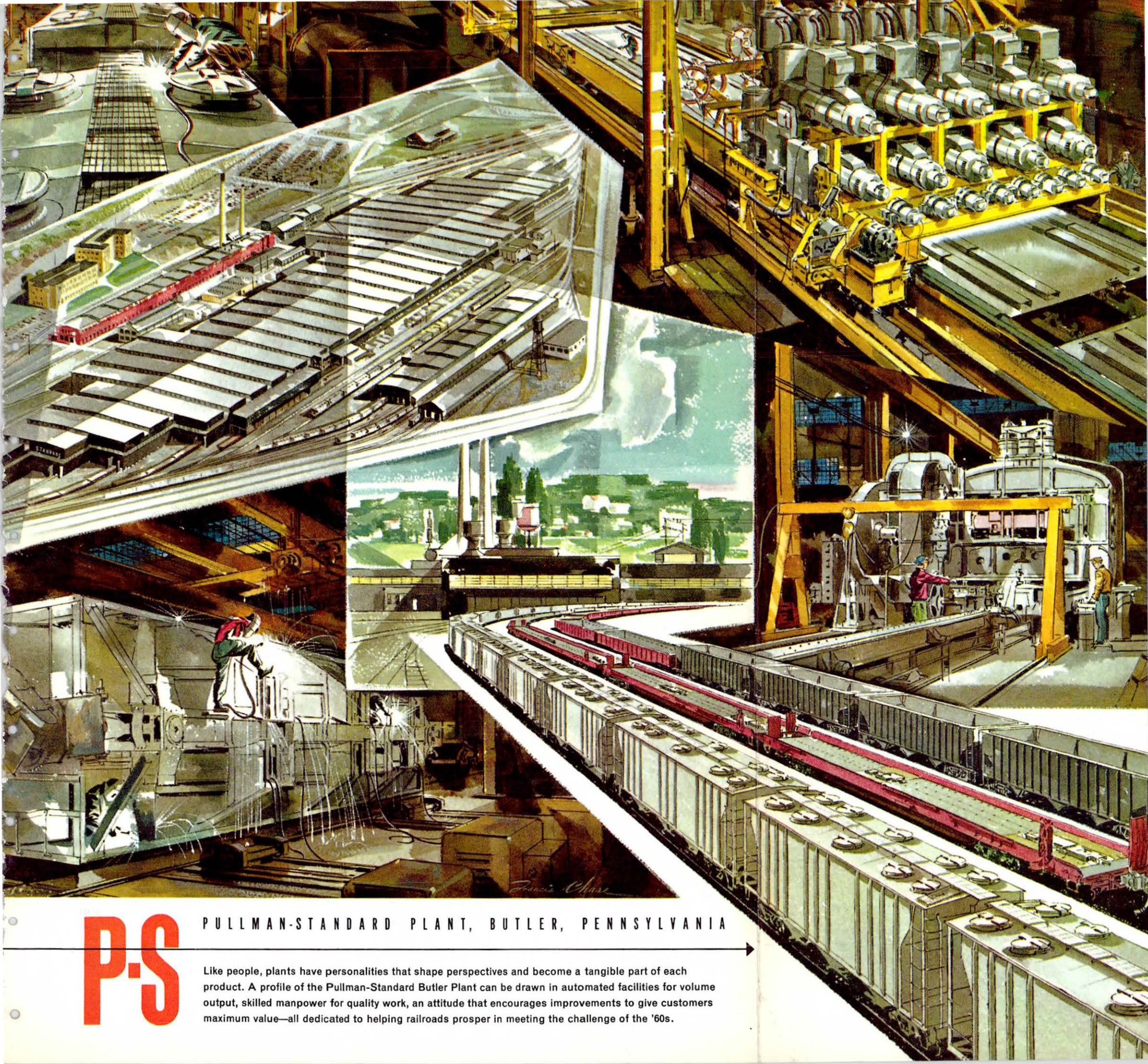
Local Chairman J. C. Laney has, in effect, been put on ice for two years, so far as holding office in the Brotherhood of Locomotive Engineers is concerned.

Grand Chief Guy L. Brown suspended Mr. Laney last week, and will take his case before the next Engineers' convention—in 1962. Reason for the suspension: Mr. Laney, a local chairman on the L&N, allegedly failed to answer Grand Lodge queries relative to his future activities, i.e., whether he planned to speak out as a brotherhood officer when his position conflicted with that of the organization.

Mr. Laney first got attention as a right-to-work supporter, more recently tried to negotiate a local agreement to insure lifetime jobs for the engineers and firemen in his division (RA, April 11, p. 9). He took the position that the battle to retain the firemen (in freight and yard service) has been lost and "we elected not to stick our heads in the sand. . . "

But the BLE took the position that Engineer Laney (a) as a local chairman has no power to negotiate such an agreement; and (b) as a brotherhood officer must follow closely policies adopted by BLE delegates.

A BLE spokesman said Mr. Laney retains "all rights and privileges of membership except that of holding office."



P-S

PULLMAN-STANDARD PLANT, BUTLER, PENNSYLVANIA

Like people, plants have personalities that shape perspectives and become a tangible part of each product. A profile of the Pullman-Standard Butler Plant can be drawn in automated facilities for volume output, skilled manpower for quality work, an attitude that encourages improvements to give customers maximum value—all dedicated to helping railroads prosper in meeting the challenge of the '60s.

P-S STANDARDIZED ROLLING STOCK

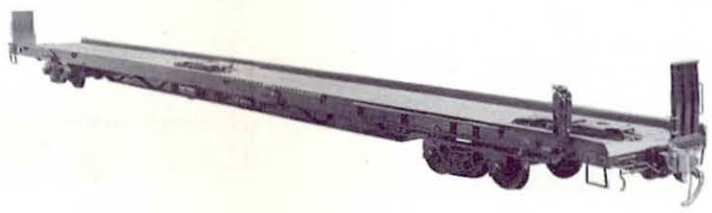
PRODUCTS OF MODERN MASS PRODUCTION FACILITIES

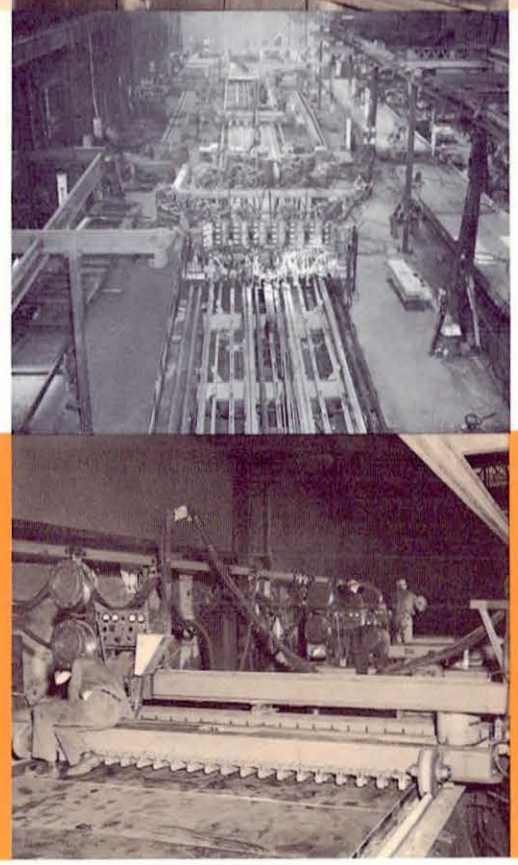
All Pullman-Standard plants, like this one at Butler, Pennsylvania, are equipped with modern production methods, skilled manpower and extensive facilities to mass produce the very finest in standardized railroad rolling stock.

PS-2 COVERED HOPPER CAR—a product of the P-S Butler Plant. Modern building methods help keep the PS-2 ahead in design, performance and economy. This rugged, all-welded but economical car results from skilled application of the very latest production line equipment. Thoroughly standardized but constantly improved upon, the PS-2 is now available in four capacities, 2007, 2929, 3215 or 3506 cu. ft.

REVOLVING WELDER AT BUTLER PLANT—one of many, but definitely the most unique automatic welding machine on the PS-2 line—clamps to circular hatch coaming and rotates 360°, uniting hatch coaming with roof sheet in one continuous, strong weld. Exclusive, specially designed, automatic equipment like this gives you high-performance, long service-life standardized freight cars at low cost.

PS-4PB FLAT CAR—85 feet of piggy-back economy. This lightweight but strong Butler Plant product replaces dead weight with payload . . . already the standard of piggy-back fleets with over 2400 units sold in the first 18 months of production . . . another P-S standardization success story.

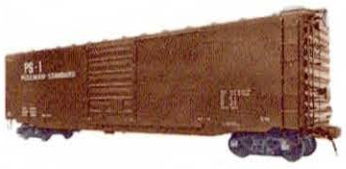




AT BUTLER, A 385-FT. WELDING JIG—longer than a football field—helps give big PS-4PB s strong, unitized body construction. Twenty automatic submerged arc welding heads lay down ten welds simultaneously to make body components and underframe into one all-welded structure for a car of great strength but light weight.

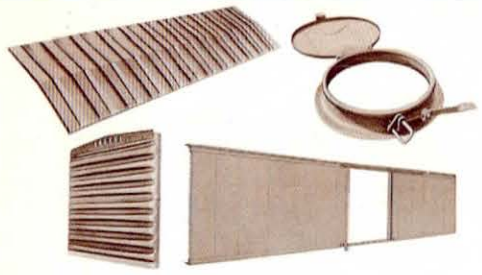
PS-5 GONDOLA—originally developed through long cooperation with major railroads, the rugged PS-5 is now rolling off Butler Plant lines. It combines quality with the mass-manufacturing savings possible through P-S standardization. Built with production line equipment, the PS-5 includes sufficient design versatility to meet variations in gondola use requirements.

AUTOMATIC FLOOR-PLATE WELDER AT BUTLER—butt welds ⅜" copper bearing steel plates into one even, smooth sheet to help provide PS-5s with uniformly strong, low maintenance steel floors. Another of the tools of P-S standardization designed to capitalize on the many inherent advantages of modern mass production methods. Another P-S way of producing cars of high quality, modern capability at lowest possible price.



PS-1 BOX CAR—standardization pioneer of the railroad industry. In thirteen years, 257 improvements have been added to the original PS-1 design. Options in car lengths, interiors, door types and sizes, and other accessories are available.

PS-3 OPEN HOPPER CAR—built to withstand all the hard service and abuse to which hopper cars are subjected. Standardized for original investment economies and built for long life and low maintenance service.



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Hotbox Detector Cuts Setouts

Servo hotbox-detection equipment has helped the Clinchfield reduce setouts near Fort Blackmore, Va., by almost half.

Detectors in the installation inspect five southward-moving coal trains (450 cars) a day.

The detectors are some 64 miles south of the railroad's northern terminus at Elkhorn City, Ky., about halfway to the division point at Erwin, Tenn. (see map). Choosing the location for the detectors posed a problem: Servo Corporation engineers recommend that detectors be placed on tangent track at least 2,600 ft from a curve. Finding a piece of tangent that long in the desired area on this curving mountain railroad was not easy. The tangent section was located, however, although the inspected trains go around a curve soon after passing the detectors.

The entire 277-mile railroad has CTC signaling. Hence, it was desirable to have the hotbox recorder in the dispatcher's office at Erwin, site of the CTC control machine. Erwin, however, is 71 miles from the detector site. It was decided, therefore, to transmit the heat signals from the detector to recorder by carrier.

The carrier signals are superimposed on the message circuit. Two separate Harmon FM carrier channels were provided, one for the heat signal from each side of the train. The frequencies chosen were 40 kc and 55 kc.

Total cost of the detection system was $20,674, of which $717 represents the cost of the carrier equipment.

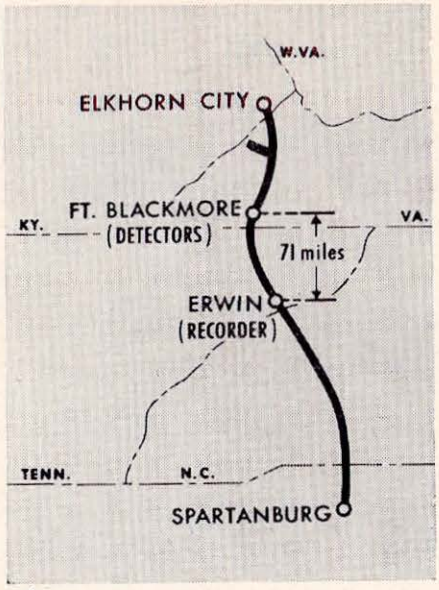
Warned by Light and Sound

To alert the chief dispatcher of the approach of a train to the detector, a buzzer is sounded and a red indication lamp is lighted approximately eight minutes before the train's arrival at the detector location. Connections to the CTC indication circuits are utilized to provide this warning. The buzzer may be silenced by operating a toggle switch. The red lamp remains on until the train clears the approach circuit in which the detection equipment is located.

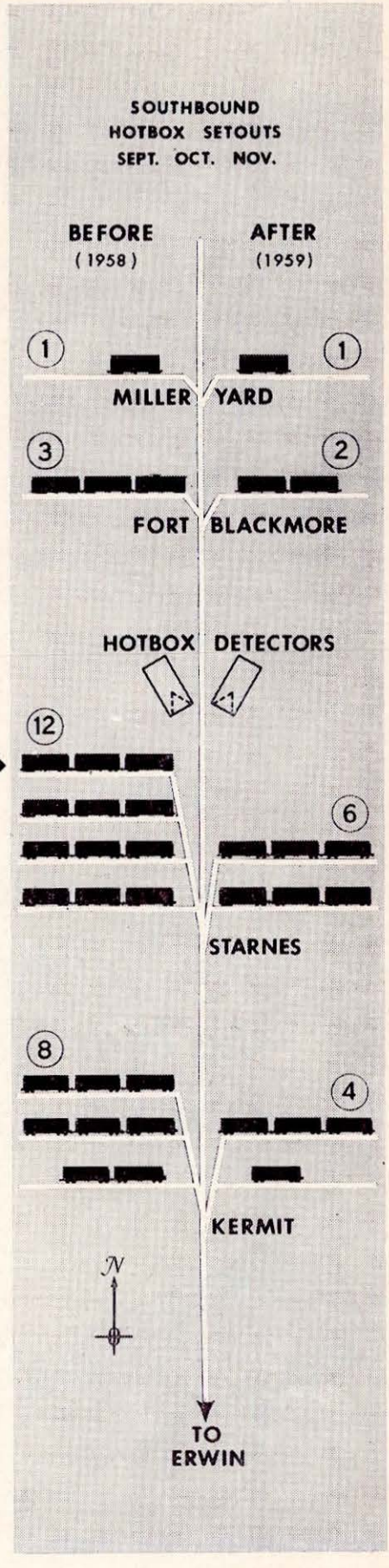
The chief dispatcher scans a graph indicating the journal temperature and, if an abnormal temperature is noted, advises the dispatcher to stop the train. The train dispatcher places a controlled red signal (no special aspect) about five miles past the detector and turns on the maintainer call light. Clinchfield operating rules require any person seeing a lighted maintainer call light to contact the train dispatcher. When a member of the crew calls in, he is told the location of the hot journal.

"The train crew at present decides if the car can be moved or must be set out," says W. E. Prince, Jr., engineer of signals and comunications. "We have not set a fixed deflection point beyond which cars will always be set out, but every deflection of more than 10 to 12 mm above the normal is reason to stop the train for inspection."

The Clinchfield is planning installation of detectors at two more points. The first will be approximately 50 miles south of Erwin to check southbound trains, the second about 30 miles north of Spartanburg, S.C., to check northbound trains from connections at the southern terminus. The first recorder will be in the Erwin Yard office and the second at Bostic Yard, N.C.



HOTBOX RECORDER is in the dispatcher's office at Erwin, Tenn., 71 miles from the detection equipment. More detector installations are planned for sites 50 miles south of Erwin and 30 miles north of Spartanburg, S.C.

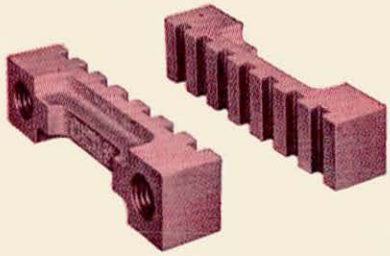


EFFECT OF DETECTOR on the number of freight car setouts is shown in this diagram. Circled numbers indicate how many cars were set out at each location—during the indicated months—before and after installation of the detection equipment.

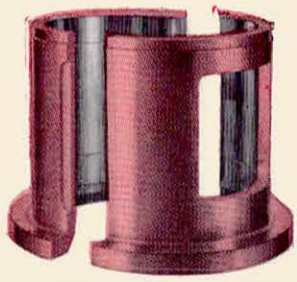
RAILROAD BEARINGS are MAGNUS' BUSINESS

Today, and tomorrow too,
you can bank on Magnus to give you
the bearing performance you want
at a price you can afford to pay!

Magnus Solid Journal Bearings



Magnus R-S Journal Stops



Magnus Traction-Motor Support Bearings

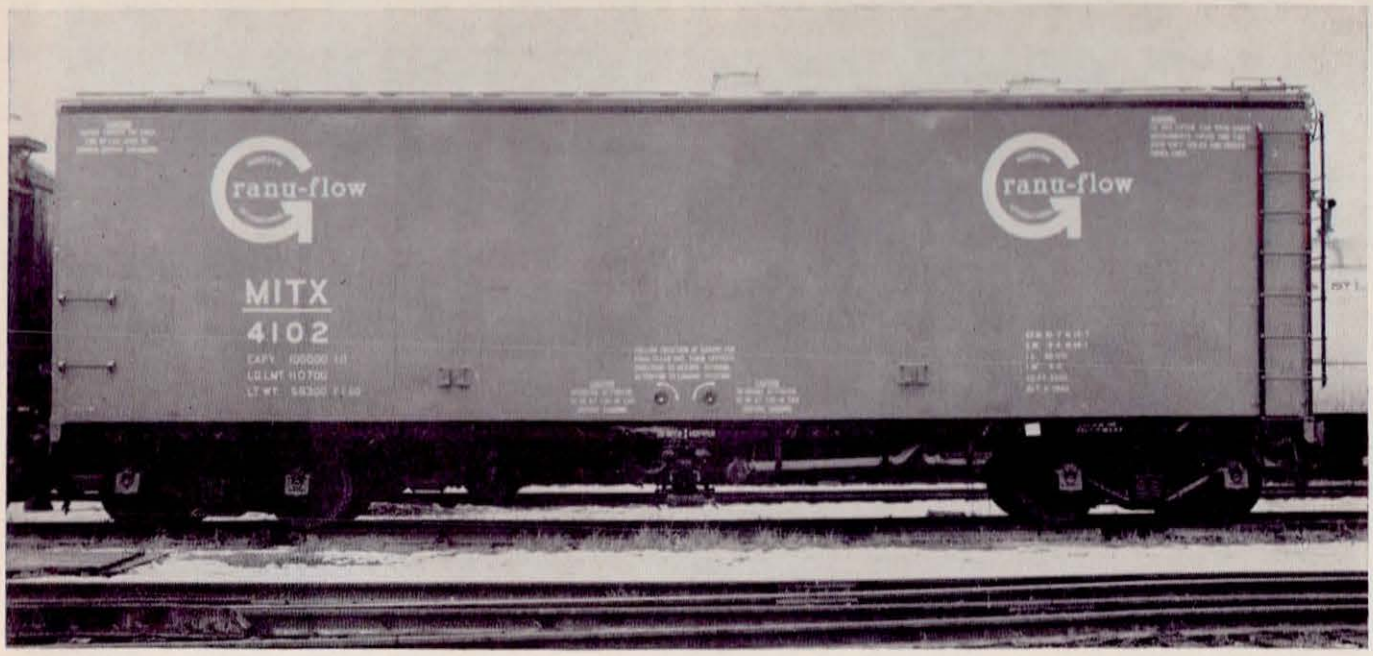
YES, Magnus is in the railroad bearing business—has been almost from the days of the Tom Thumb! And during this century of specialized service, Magnus has pioneered many significant advances in bearing metallurgy and design—to provide better bearing performance at lowest possible cost.

For example, the recently-introduced Magnus R-S Journal Stops have given railroads the first truly low-cost solution to the hot-box problem. By taking the "slop" out of the journal box, R-S Journal Stops prevent excessive displacement or lifting of the bearing—even under the most severe braking and switching impacts. They increase bearing life 200 per cent, reduce wheel flange wear, protect dust guards—cut operating costs all along the line. Magnus lubricators provide another important link in the chain of improved bearing performance. And in diesel-electric and electric locomotives and MU cars, modern Magnus traction motor support and armature bearings assure trouble-free mileage between motor overhauls.

And Magnus is keeping a weather eye on the *future*, too. With this background of railroad experience, Magnus is continually developing and testing new designs of journal box components for still greater efficiency and economy in railroad service. Whatever the future may hold, of this you can be sure. Tomorrow's rolling stock will ride on Magnus bearings—bearings that are *right for railroads* in performance and in cost. For further information on Magnus bearing products, write to Magnus Metal Corporation, 111 Broadway, New York 6, or 80 E. Jackson Blvd., Chicago 4.

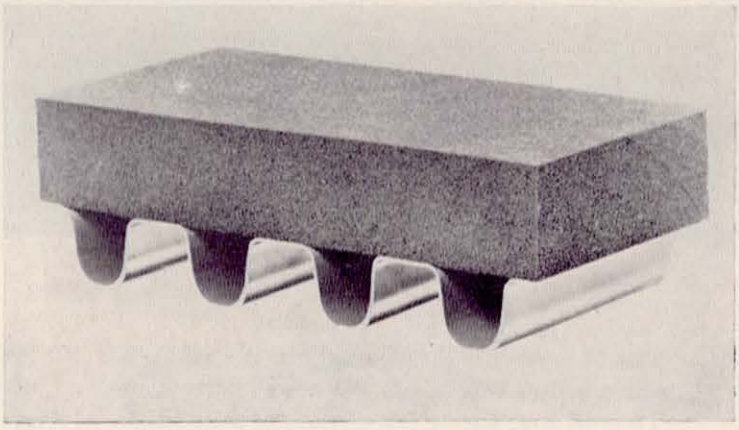
MAGNUS METAL CORPORATION
Subsidiary of **NATIONAL LEAD COMPANY**

GEARED TO PROGRESS
PRI MEMBER



PROTOTYPE CAR incorporating new method for transporting bulk loads of fine granular material was outfitted at GN's St. Cloud shops. Finished early this year, it has been under test ever since.

GN Tests New Technique for Bulk Lading



URETHANE FOAM FLOOR cross-section shows plastic corrugated vanes bonded to the underside.

Fluidization is the key to unloading the Granu-flow car.

Air introduced through a urethane foam floor puts in suspension or fluidizes any bulk load of fine granular material, such as flour, sugar, starch or chemicals. In this state the lading assumes the flow characteristics of a liquid. With only a six-degree floor slope from the ends to the center the car unloads by gravity.

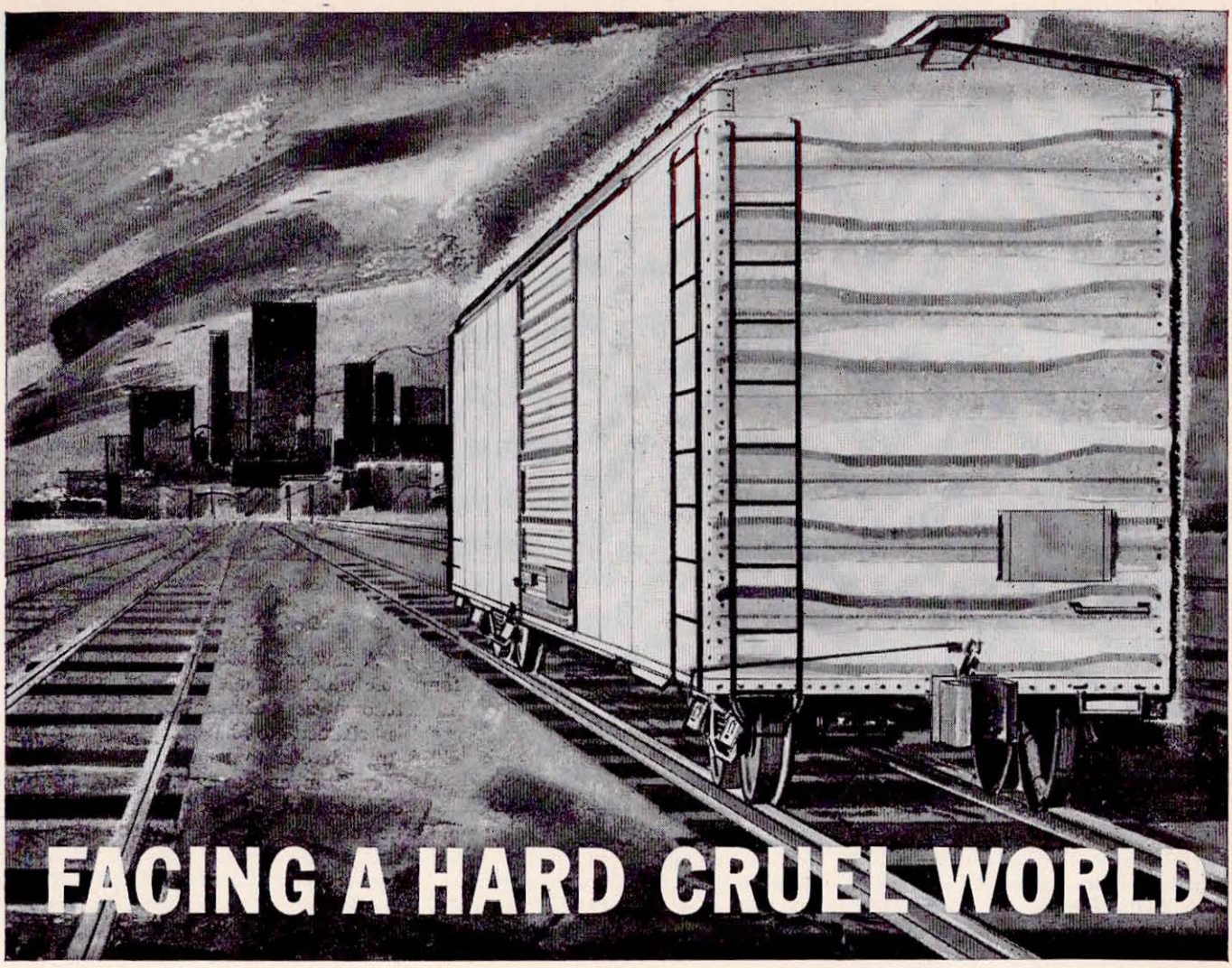
The prototype car was built early this year by the Great Northern in its St. Cloud, Minn., car shops for the Minnesota International Transportation Corporation, Minneapolis, and Interail Holdings, Hopkins, Minn. Since then, it has been under test.

Here's how fluidization takes place:

At the unloading point, an air supply from a centrifugal blower is connected to a centrally located inlet pipe under the car. The air flows through corrugated vanes in a sheet of acrylic-nitrile plastic bonded to the underside of the fluidizing sheet. The sheet, applied over a 1-in. plywood floor, is made of nontoxic, odorless and abrasion-resistant urethane foam. Air from the blower produces a surface pressure of 1.25 psi under the foam. The foam cells act as one-way valves that permit the air to pass through the floor and into the lading, fluidizing it. When unloading is completed and air flow shut off, the foam cells close and prevent any granular material from impregnating the foam floor.

For final cleanout, a residual activator or scoop at each end of the car is operated by an exterior hand crank through sealed bearings. These devices are moved by sprocket and chain from end of car to discharge ports, removing the remainder of the lading. Activators must be positioned at the car ends before loading.

Standard exterior box car construction is the basic shell for the 40-ft Granu-flow car with 3,200 cu ft capacity. The interior steel sides and ends are lined with 4-in. fiber glass insulation, the roof 3-in., all covered with a panelled ½-in. plywood lining sealed with Archer-Daniels-Midland Freight-Liner. A full 4¼-in. center bulkhead divides the car for split ladings. Permanent ladders at each side of the bulkhead give access to the hatches. Below the bulkhead are two discharge ports, positioned for existing discharge equipment, with individual gates for unloading either side.



AND FRICTION HERE CAN HELP

WESTINGHOUSE

MARK 40

FRICTION DRAFT GEAR

(A.A.R. CERTIFICATE NO. 35)

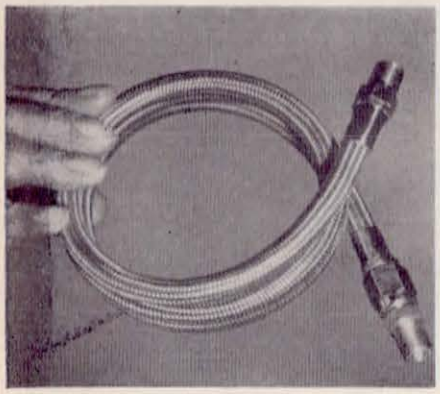
The *hard knocks* this car and its ladings will face can be minimized through the tremendous shock-softening capacity of the MARK 40 Friction Draft Gear. Here is that most needed high capacity with *high absorption*, yet *low reaction* or sill pressure. The MARK 40 WILL CUT DAMAGE CLAIMS, *reduce* car maintenance, and lengthen the life of the car! Fits standard 24⅝-inch pockets . . . has 3¼ inches of travel.

The Mark 40 is a higher capacity *friction* draft gear offered for standard pockets.

CARDWELL WESTINGHOUSE COMPANY

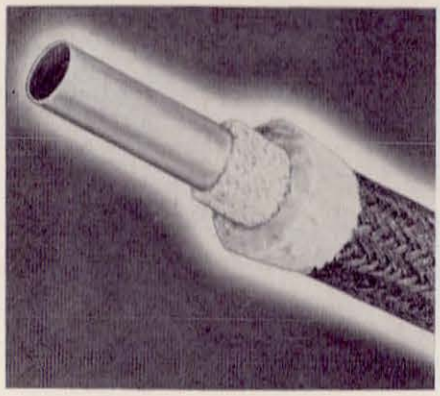
332 So. Michigan Ave., Chicago 4, Illinois
Canadian Cardwell Co., Ltd., Montreal 18, Quebec

New Products Report



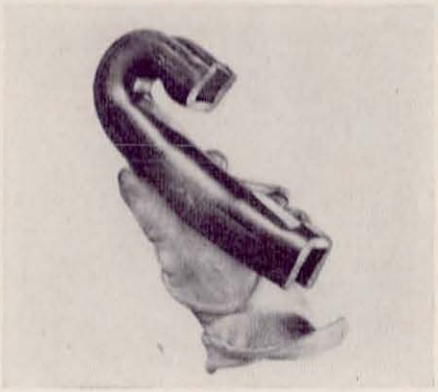
Flexible Steam Hose

The White Line steam hose has been designed to combat the ravages of live steam transmission with modern materials. The hose incorporates an extruded Teflon inner core, pure bronze wire reinforcing braid, and swaged fittings with resistance to deterioration, abrasion, scaling, blow-offs, and leakage. It is available as assembled lengths, or as specialized hose lengths, in sizes from ¼ to 1 in. *Titeflex Inc., Dept. RA, Hendee St., Springfield 4, Mass.*



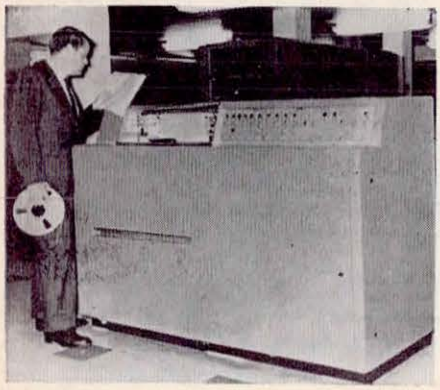
Insulating Covering

Insutube is a slip-on lightweight, noncombustible flexible tubing designed for temperatures ranging from 50 to 500 deg F. It is used for insulating bent piping or tubing where the use of rigid material is impractical. Tubes range in size from ¼ in. up to 1 in., in increments of ⅛ in., also in 1½ in. and 2-in. sizes, all ½ in. thick. *Union Asbestos & Rubber Co. Fibrous Products Div., Dept. RA, 1111 W. Perry St., Bloomington, Ill.*



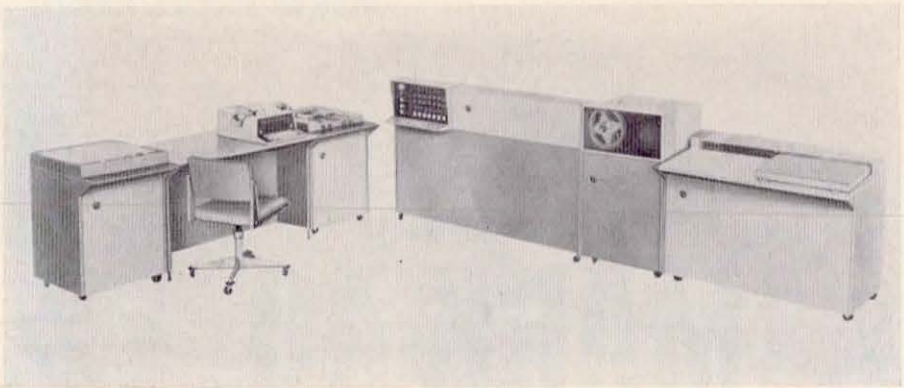
New Rail Anchor

A new one-piece rail anchor is available which has a U-shape cross-section. Known as "Channeloc," the anchor is claimed to have high gripping strength due to its double-flange support from end to end. Other features claimed for Channeloc include 100% tie bearing, smooth contours, wide striking surface for hand or machine application and large, flat rail-contacting surfaces. *True Temper Corporation, Dept. RA, Cleveland, Ohio.*



Compatible Printer

A 600-line-a-minute printer is now compatible with Univac tape-fed computer systems and those of other manufacture. The computer is not tied up while the printing is done. The printer automatically reads, checks and prints out information from magnetic tape. It prints an entire line at once, which may contain up to 130 characters, alphabetical and/or numerical. *Remington Rand Univac, Dept. RA, 315 Park Ave., New York 10, N.Y.*



Transistorized Computer

The RPC-9000 is a transistorized computer that accepts data in random order, and all affected records are automatically updated in a single uninterrupted sequence of operations. The basic system consists of a central processing and control unit which operates in microseconds, performs the calculations, controls the program, and searches the external memory tape; a continuous magnetic tape file for data storage; an input-output tape typewriter system that reads paper tape at 60 characters per second, and punches tape at 30 characters per second.

Optional units include a 400 cards-per-minute photoelectric reader for input of data contained in 80-column punched cards; a 300-characters-per-second tape perforating unit; and a 666 or 1,000 lines (of 120 alpha-numeric characters each) per minute printer. *Royal McBee Data Processing Division, Dept. RA, Port Chester, N.Y.*

Seaway Chief Predicts 'Gradual' Cargo Increase

Lewis G. Castle, administrator of the St. Lawrence Seaway and Development Corp., expects "a gradual increase in cargo flow and dollar income" to make the Seaway self-supporting.

This prediction, he told a Syracuse University audience last week, is warranted by analysis of operations in 1959, when 6,595 vessels carried 20,000,000 tons of cargo through Seaway facilities. He noted that toll income permitted payment of $2,000,000 to the U. S. Treasury Department on the Seaway debt.

Mr. Castle described Seaway critics as "doubting Thomases viewing with alarm."

Replying to those who say the Seaway will mean an influx of foreign-made goods into the U. S., Mr. Castle said that during 1959 the Seaway handled 2,450,000 tons of export cargo (excluding goods going to Canada) and 1,135,000 tons of import cargo. Thus, he said, Seaway traffic maintains a "favorable balance."

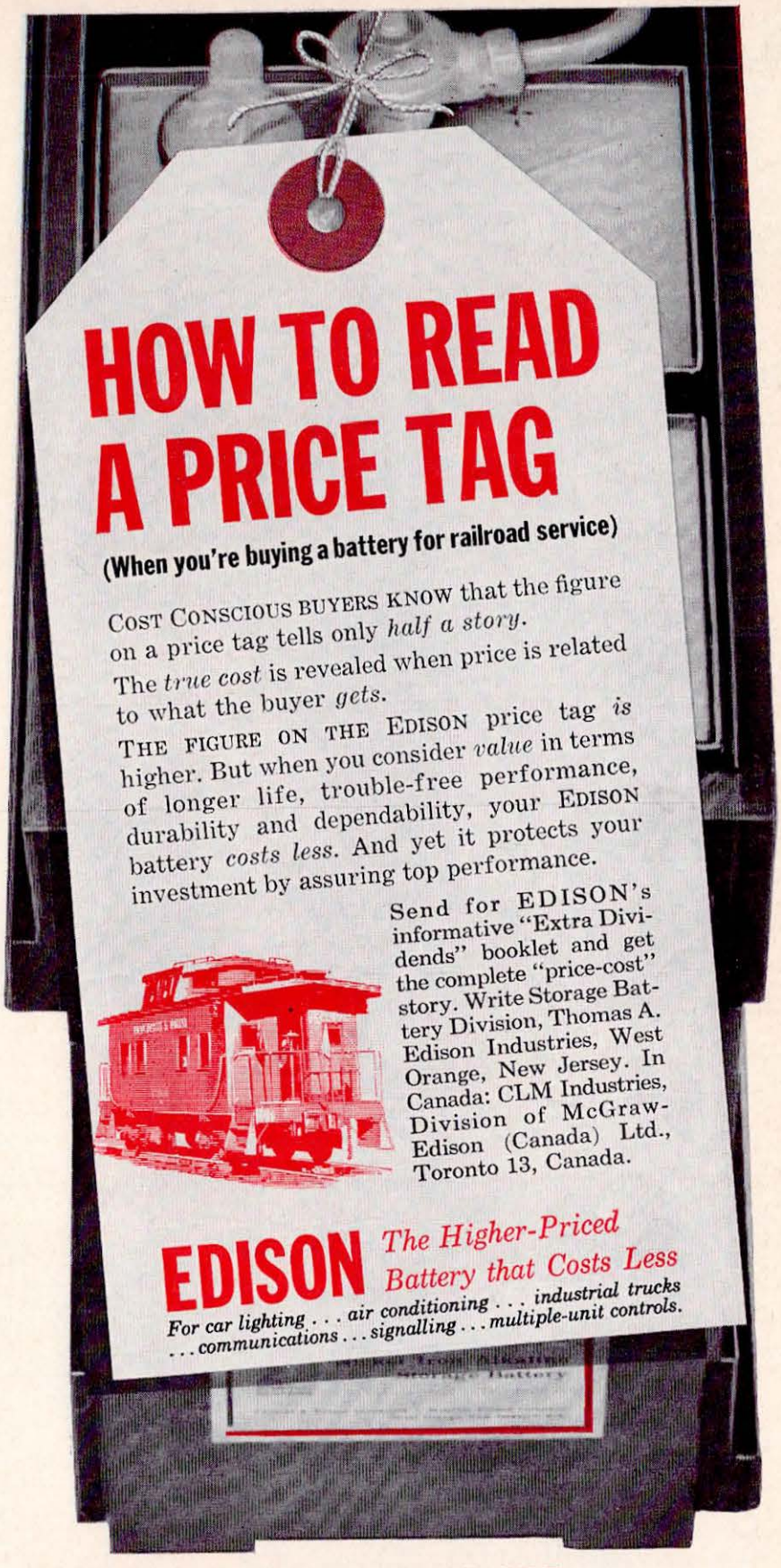
He also took note of criticism that the Seaway locks would be an easy enemy target in wartime. He conceded that this was true, but said "all seaboard ports, ore mines, electric utilities, grain elevators, railways and battleships would likewise be war targets." On the other hand, he said, the Seaway in time of war would provide a shorter route to Europe from the submarine-free Great Lakes.

Mr. Castle concluded: "Progress and reality cannot be disregarded. One cannot hide his head in the sand and ignore the certainty of stimulated and imaginative forward progress in our country's economy. With the continued dredging of Great Lakes channels and harbors, with the spreading of information about the economies and the conveniences of the Seaway, and with the added stimulation of traffic by Great Lakes ports and ship lines, we shall amply justify this new avenue of commerce."

Another speaker at the 12th annual Syracuse Transportation Conference—Dr. Burton N. Behling, AAR economist—heartily agreed that the Seaway should be self-supporting. But he was less optimistic than Mr. Castle.

Dr. Behling maintained that last year's financial results "tend strongly to confirm the position that the tolls were fixed too low." He added:

"Unless the Great Lakes-St. Lawrence Seaway in all its parts is a fully self-supporting transportation facility, with no element of subsidy to the users, it cannot possibly contribute to the true economy of the whole transportation complex of the United States."


HOW TO READ A PRICE TAG
(When you're buying a battery for railroad service)
COST CONSCIOUS BUYERS KNOW that the figure on a price tag tells only *half a story.*
The *true cost* is revealed when price is related to what the buyer *gets.*
THE FIGURE ON THE EDISON price tag *is* higher. But when you consider *value* in terms of longer life, trouble-free performance, durability and dependability, your EDISON battery *costs less.* And yet it protects your investment by assuring top performance.
Send for EDISON's informative "Extra Dividends" booklet and get the complete "price-cost" story. Write Storage Battery Division, Thomas A. Edison Industries, West Orange, New Jersey. In Canada: CLM Industries, Division of McGraw-Edison (Canada) Ltd., Toronto 13, Canada.
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For car lighting . . . air conditioning . . . industrial trucks . . . communications . . . signalling . . . multiple-unit controls.
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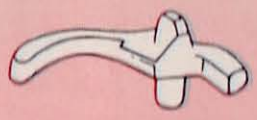
Top Lock Lifter Assembly . . . Cat. No. E-6-A

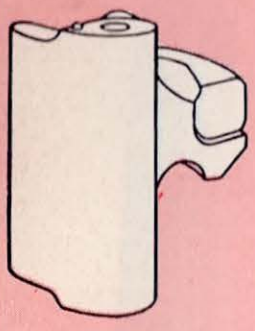
Top Lock Lifter Hole Cap Cat. No. E-2

Top Lock Lifter Hole Cap Cat. No. E-2-A

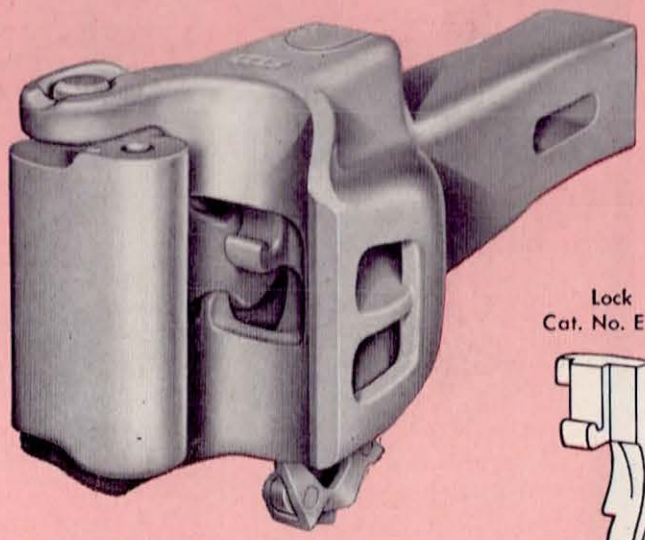


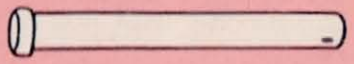
Knuckle Thrower...Cat. No. E-30

Articulated Rotary Locklift assembly
Single . . . Cat. No. E-24-B
Double . . . Cat. No. E-25-B



Knuckle . . . Cat. No. E-50



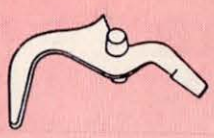


Knuckle Pivot . . . Cat. No. C-10

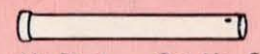
Lock
Cat. No. E-40

AAR Standard
Type E
Coupler Parts

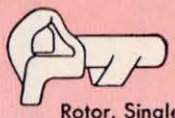
New Youth for



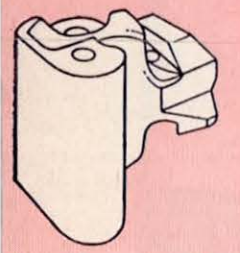
Knuckle Thrower
Cat. No. F-31



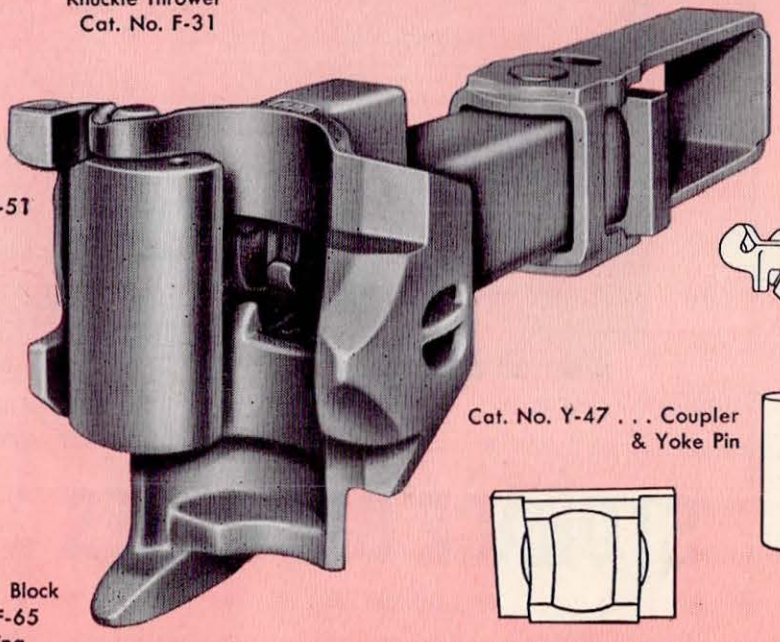
Knuckle Pivot . . . Cat. No. C-10



Rotor, Single
Cat. No. F-8



Knuckle . . . Cat. No. F-51



Lock . . . Cat. No. F-41

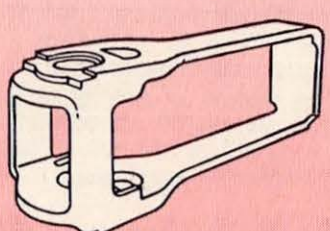
Rotary Lock Lift Assembly Cat. No. F-7 AND Rotor F-8 Assembled.

Rotary Lock Lift Assembly Cat. No. F-7

Cat. No. Y-47 . . . Coupler & Yoke Pin

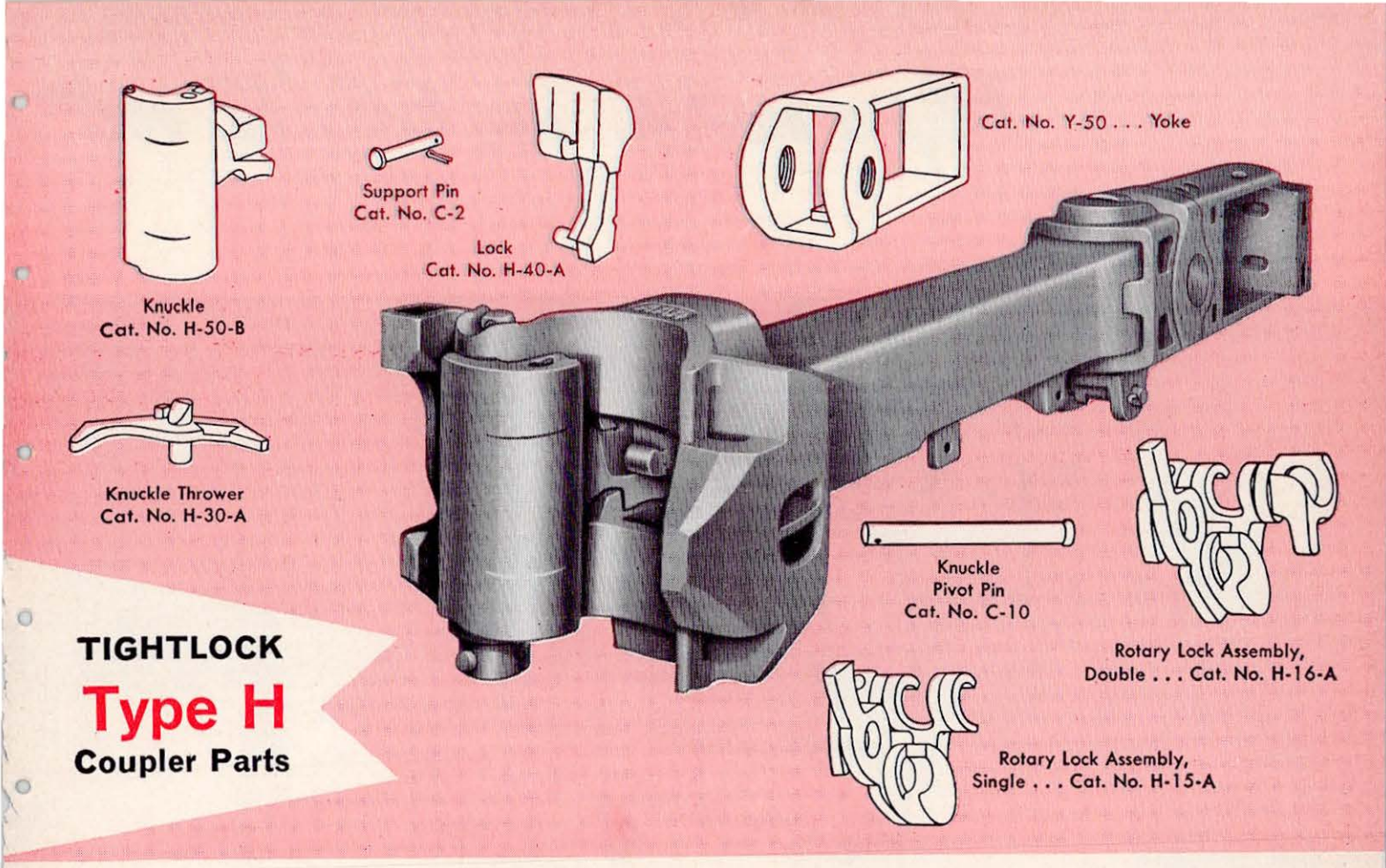
Pin Bearing Block Cat. No. F-65 and Spring No. F-66

Cat. No. Y-46 . . . Follower



Cat. No. Y-45 . . . Yoke

AAR Standard
Type F
Coupler Parts



TIGHTLOCK
Type H
Coupler Parts

Aging Couplers

with the toughest repair parts made!

When couplers need rebuilding or repairs, remember . . . Only ASF makes ALL types of AAR approved coupler designs. Whatever your requirements, therefore, you can be sure they will be promptly and completely satisfied. What's more, ASF parts are not only the toughest, most durable made but they are guaranteed to be original replacement parts, precise in every minute detail of shape and dimension.

So, when you rebuild with ASF parts, the finished product is, for all practical purposes, a brand new coupler. To serve you promptly, too, we maintain a large inventory of coupler parts ready for immediate shipment. So, any time you need coupler-parts, call in your ASF representative. Get the toughest repair parts made!

ASF PARTS FULLY SATISFY AAR TEST SPECIFICATIONS

ASF **Couplers**

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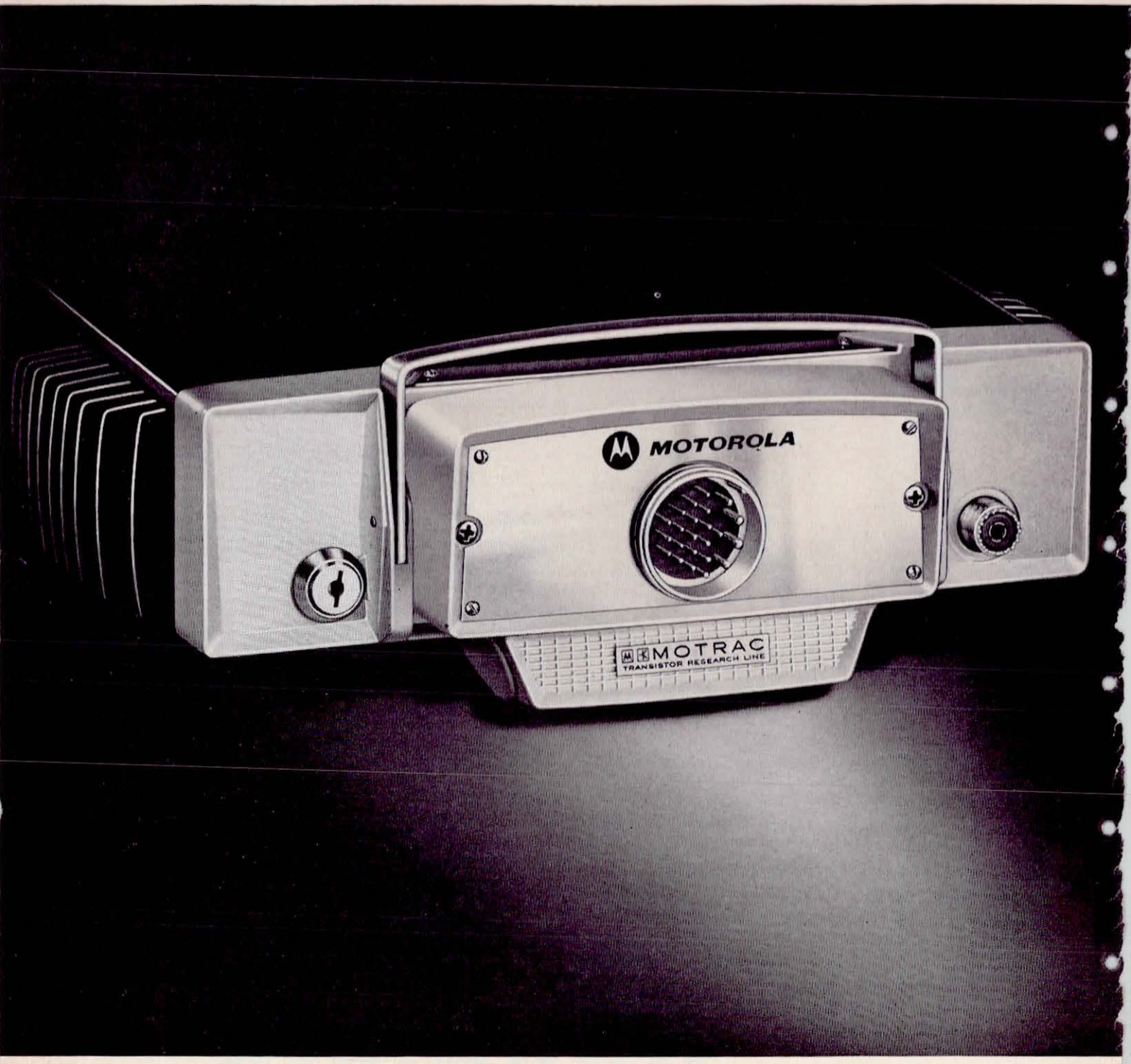
RPI MEMBER

AMERICAN STEEL FOUNDRIES
Prudential Plaza, Chicago 1, Illinois

Canadian Manufacturer and Licensee: International Equipment Co., Ltd., Montreal 1, Quebec
Other Foreign Sales: American Steel Foundries, International, S.A., Chicago

Flip a switch... use 64/12 volt



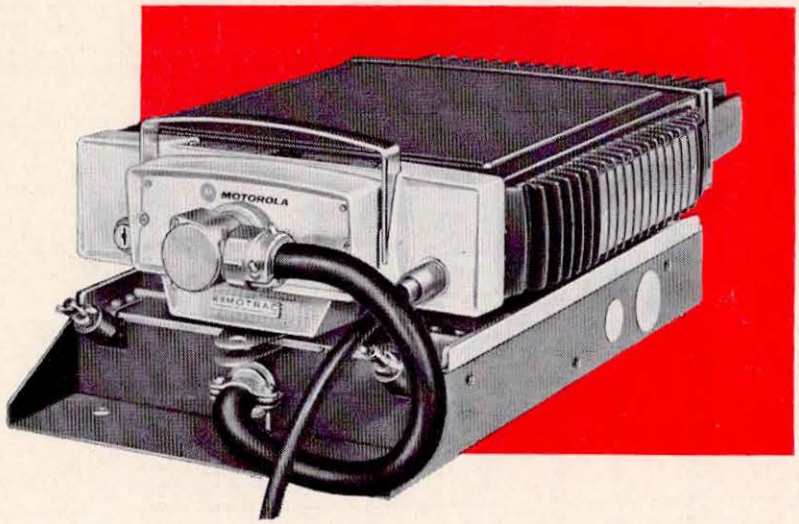
MOTOROLA

MOTOROLA MOTRAC RADIO

in ENGINE...CABOOSE...BASE STATION

- **NO NEED TO CHANGE POWER SUPPLY, one radio serves both 64 and 12-volt DC applications.**
- **No radio modification required for base station use—AC-to-DC Adapter available for operation from 117-volt, 60 cycle current.**

Mounts in standard AAR single unit rack.



Now, new flexibility . . . new time and money savings can be yours when you standardize on one basic radio to serve all of your operational needs. The Motorola MOTRAC Universal Railroad Radio can be used in the engine from 64-volt DC power . . . in the caboose from the 12-volt DC power . . . and in base station applications from 117-volt AC power with adapter.

HERE ARE THE FACTS:

MOTRAC radio eliminates the common maintenance problems. No tubes in the receiver and no vibrators in the power supply.

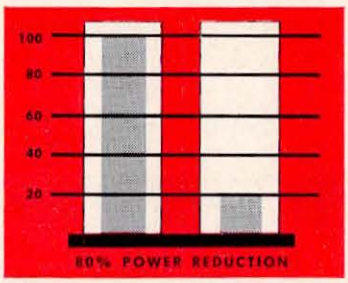
- Voltage changeover switch is readily accessible to authorized railroad personnel—voltage may be switched from outside of housings, yet is protected from inadvertent switching.
- All components are in one "package" with common metering sockets readily accessible—operation can be tested quickly with present Motorola test equipment.
- Polarity protection assures against damage to radio if primary voltage of wrong polarity is applied.
- Completely enclosed housing provides maximum protection from dust, dirt and water.

In Motorola MOTRAC Universal Railroad Radio, every attribute of the transistor—reliability, light weight, compactness, reduced maintenance and operating costs—are initially and fully realized.

THE RESULT: ***Reliability*** never before achieved in railroad communications.

All the facts are as close as your nearest Motorola Railroad Communications Representative. Call him today.

POWER SUPPLY—The *first* to provide dual voltage with proven transistor reliability. This dynamic new concept in a railroad transistorized power supply is accomplished through the use of series transistor switching circuits. The series circuit design allows greater safety margin since only low voltages are applied to power transistors—heat producing voltage dropping resistors are eliminated. **VOLTAGE REGULATION** feature assures constant operating voltages—longer transmitter tube life . . . stable receiver performance. **OVERLOAD PROTECTION** automatically removes radio from the primary power in the event that overloads or short circuits occur.



RECEIVER—With transistors, power consumption is cut 80% and operating temperatures are reduced up to 40°F. *Rugged die-cast chassis* and the use of dependable printed circuitry are among the industry's most advanced design features.

TRANSMITTER—Proven Motorola design uses only five tubes—with only three different tube types. This means valuable time and money savings—minimum tube replacement problems. External heat sinks assure maximum component service and efficiency.

MOTRAC UNIVERSAL RAILROAD RADIO

Motorola Communications & Electronics, Inc., 4501 Augusta Blvd., Chicago 51, Illinois. A Subsidiary of Motorola Inc.

MOTRAC is a trademark of Motorola Inc.

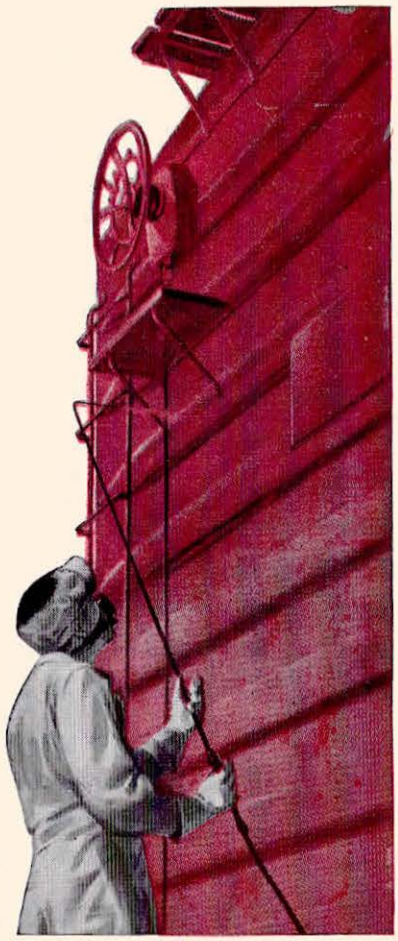
REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

MONTH OF JANUARY OF CALENDAR YEAR 1960

Name of Road	Average mileage operated during period	Operating Revenues: Freight	Pass.	Total (Inc. misc.) 1960	1959	Operating Expenses: Maint. Way and Structures: Total 1960	Total 1959	Deprec and Retirements	Maint. Equipment: Total 1960	Total 1959	Deprec. and Retirements	Traffic	Transportation	Total 1960	Total 1959	Operating ratio 1960	1959	Net from railway operation	Railway tax accruals	Net Railway operating income 1960	1959
Akron, Canton & Youngstown.....Jan.	171	477	....	488	446	54	62	6	76	62	15	43	154	374	360	76.6	80.8	114	65	35	22
Alabama, Tenn. & Northern.....Jan.	214	260	....	263	273	53	50	6	10	11	6	4	83	154	150	58.6	54.9	109	25	22	24
Atchison, Topeka & Santa Fe.....Jan.	12,970	39,328	3,125	47,026	47,852	5,464	6,018	736	10,254	10,119	2,448	1,349	18,226	37,657	37,604	80.1	78.6	9,370	5,990	2,773	3,353
Atlanta & St. Andrews Bay.....Jan.	81	322	....	327	323	34	41	4	27	31	8	8	76	168	178	51.4	55.1	159	71	50	50
Atlanta & West Point.....Jan.	93	229	26	302	304	35	35	7	48	51	14	18	132	254	263	84.3	86.4	47	18	12	—5
Western Ry. of Alabama.....Jan.	133	277	24	335	345	53	45	9	57	62	19	20	145	298	295	89.0	85.6	37	36	9	11
Atlantic Coast Line.....Jan.	5,573	11,609	1,651	14,291	14,073	1,983	1,870	180	2,364	2,559	679	519	5,680	11,392	11,418	79.7	81.1	2,899	1,525	615	630
Charleston & Western Carolina....Jan.	Merged with Atlantic Coast Line effective January 1, 1960.																				
Baltimore & Ohio.....Jan.	5,911	30,751	1,300	34,554	30,080	3,400	3,577	508	7,151	6,270	1,106	907	14,631	28,049	26,596	81.2	88.4	6,505	2,506	1,982	—375
Staten Island Rapid Transit.....Jan.	29	169	89	265	293	61	63	10	46	43	2	2	150	290	306	109.4	104.6	—25	49	—95	—86
Bangor & Aroostook.....Jan.	602	1,440	21	1,499	1,508	386	382	19	262	277	110	32	443	1,202	1,245	80.2	82.5	297	91	225	209
Bessemer & Lake Erie.....Jan.	203	1,433	....	1,535	922	179	240	23	528	426	141	32	420	1,313	1,238	85.6	134.2	221	430	226	107
Boston & Maine.....Jan.	1,557	5,000	510	5,961	6,361	632	826	143	847	893	251	152	2,560	4,540	5,222	76.2	82.1	1,421	449	423	100
C. P. R. Lines in Maine.....Jan.	234	1,031	62	1,117	1,039	84	138	20	138	143	18	24	243	515	557	46.1	53.6	602	35	443	318
Carolina & Northwestern.....Jan.	284	284	....	288	283	31	37	7	28	31	21	5	89	166	166	57.6	58.5	122	21	34	38
Central of Georgia.....Jan.	1,745	3,251	135	3,559	3,604	570	579	41	740	690	194	174	1,453	3,130	3,169	88.0	87.9	428	282	158	188
Central of New Jersey.....Jan.	596	3,497	466	4,275	4,283	472	487	99	725	909	134	76	2,196	3,732	3,980	87.3	92.9	543	495	—309	—369
Central Vermont.....Jan.	375	701	63	839	829	113	121	17	111	117	9	18	335	618	680	73.6	82.1	221	56	50	—35
Chesapeake & Ohio.....Jan.	5,122	27,367	427	28,957	28,899	3,300	2,960	446	5,452	5,076	1,894	851	10,533	21,663	21,522	74.8	74.5	7,293	3,533	4,048	4,439
Chicago & Eastern Illinois.....Jan.	862	2,286	189	2,726	2,874	334	372	31	549	515	183	143	1,194	2,406	2,476	88.3	86.1	320	227	—15	—48
Chicago & Illinois Midland.....Jan.	121	589	....	602	426	30	34	7	106	96	23	31	148	367	340	61.0	79.7	235	132	103	37
Chicago & North Western.....Jan.	9,280	13,330	1,387	16,012	16,977	2,247	2,559	395	2,872	3,127	1,017	544	7,334	14,037	15,195	87.7	89.5	1,975	1,374	—221	—398
Chicago, Burlington & Quincy.....Jan.	8,671	15,335	1,596	18,939	21,861	2,404	2,532	399	3,933	4,220	1,074	658	8,526	16,526	17,324	87.3	79.3	2,413	1,466	726	1,673
Chicago Great Western.....Jan.	1,469	2,471	7	2,666	2,775	306	402	42	392	403	127	135	960	1,888	1,960	70.8	70.6	779	314	222	296
Chic., Milwaukee, St. Paul & Pac....Jan.	10,599	14,337	1,148	17,336	18,567	2,586	2,704	432	3,517	3,595	880	561	7,912	15,803	16,421	91.2	88.4	1,533	1,670	—790	—142
Chicago, Rock Island & Pacific.....Jan.	7,524	13,446	1,445	16,559	17,677	1,817	2,075	154	2,916	3,155	647	573	7,083	13,362	14,247	80.7	80.6	3,197	1,423	510	755
Clinchfield.....Jan.	293	1,660	....	1,670	1,749	182	217	22	307	316	107	65	452	1,076	1,126	64.4	64.4	594	208	517	514
Colorado & Southern.....Jan.	712	1,021	64	1,230	1,305	175	147	43	210	213	79	37	574	1,065	1,050	86.6	80.5	165	98	62	72
Ft. Worth & Denver.....Jan.	1,362	1,902	127	2,228	2,113	219	293	32	260	315	46	76	847	1,526	1,767	68.5	83.7	702	281	174	—28
Colorado & Wyoming.....Jan.	39	265	....	438	326	15	17	3	43	40	12	2	158	239	192	54.5	59.0	200	119	76	46
Delaware & Hudson.....Jan.	763	3,666	152	3,942	3,982	426	422	58	788	702	195	102	1,501	3,104	3,089	78.7	77.6	838	409	548	467
Delaware, Lack. & Western.....Jan.	941	4,329	761	5,834	6,032	580	656	143	1,109	1,087	343	190	3,134	5,386	5,658	92.3	93.8	448	697	—426	—431
Denver & Rio Grande Western.....Jan.	2,128	5,617	210	6,008	5,834	547	505	94	943	943	321	247	2,070	4,103	4,096	68.3	70.2	1,905	1,116	814	877
Detroit & Toledo Shore Line.....Jan.	50	587	....	644	747	45	74	4	75	91	24	21	251	409	459	63.6	61.4	235	70	27	59
Detroit, Toledo & Ironton.....Jan.	465	2,004	....	2,094	2,167	248	445	28	417	364	156	63	540	1,373	1,511	65.6	69.7	721	127	588	489
Duluth, Missabe & Iron Range.....Jan.	575	357	....	439	233	375	448	71	766	610	201	15	707	2,122	1,979	482.8	848.5	—1,682	151	—1,755	—1,879
Duluth, South Shore & Atlantic.....Jan.	544	500	3	525	418	98	103	10	101	108	26	34	186	443	451	84.3	108.0	82	42	34	—71
Duluth, Winnipeg & Pacific.....Jan.	175	506	2	514	481	72	70	5	62	62	1	8	185	338	348	65.8	72.3	176	46	44	3
Elgin, Joliet & Eastern.....Jan.	205	3,927	....	5,132	4,426	329	270	26	726	659	125	45	1,971	3,382	3,073	65.9	69.4	1,750	838	476	394
Erie.....Jan.	2,239	11,734	585	13,367	12,065	1,225	1,306	228	2,218	1,979	567	382	6,197	10,773	10,721	80.6	88.9	2,594	1,193	632	—463
Florida East Coast.....Jan.	572	2,381	556	3,219	3,519	452	496	47	607	675	117	87	1,172	2,535	2,747	78.8	78.1	683	226	228	267
Georgia Railroad.....Jan.	321	509	14	610	679	87	92	8	113	126	35	39	296	575	621	94.2	91.5	35	42	26	34
Georgia & Florida.....Jan.	321	273	....	279	314	74	69	4	44	33	10	24	97	260	241	93.0	76.8	20	19	—18	30
Grand Trunk Western.....Jan.	951	4,512	204	5,219	4,824	619	668	47	841	886	111	90	2,278	4,070	4,466	78.0	92.6	1,149	407	287	—526
Great Northern.....Jan.	8,288	14,781	652	16,570	17,819	2,320	2,460	310	3,842	3,860	876	607	7,483	15,213	15,375	91.8	86.3	1,357	1,879	—558	463
Green Bay & Western.....Jan.	219	343	....	356	367	43	39	5	46	55	9	30	122	266	270	74.5	73.7	91	45	17	20
Gulf, Mobile & Ohio.....Jan.	2,752	5,607	260	6,311	6,708	878	966	72	1,341	1,343	303	293	2,332	5,212	5,345	82.6	79.7	1,099	546	68	359
Illinois Central.....Jan.	6,500	17,254	1,894	21,473	21,960	3,144	3,257	369	4,337	4,407	848	665	8,503	17,764	18,636	82.7	84.9	3,709	2,157	892	997
Illinois Terminal.....Jan.	335	645	....	721	811	85	103	3	146	164	31	48	318	650	736	90.1	90.7	71	14	—22	—12
Kansas City Southern.....Jan.	891	3,234	60	3,659	3,842	225	264	67	532	460	112	103	1,212	2,205	2,138	60.3	55.6	1,454	605	581	725
Kansas, Oklahoma & Gulf.....Jan.	327	422	....	423	570	38	48	7	46	39	12	36	103	249	259	58.8	45.4	174	77	49	123
Lake Superior & Ishpeming.....Jan.	160	61	....	85	94	42	49	12	74	66	36	2	67	204	191	241.3	203.4	—120	44	—148	—122
Lehigh & Hudson River.....Jan.	96	264	....	264	275	24	34	2	31	33	8	15	112	202	214	76.7	77.8	61	23	1	2
Lehigh & New England.....Jan.	177	333	....	338	395	47	50	7	174	151	39	18	185	475	474	140.8	120.1	—138	30	—84	—16
Lehigh Valley.....Jan.	1,127	4,388	135	4,726	4,369	546	596	96	832	990	2193	132	2,384	4,127	4,530	87.3	103.7	599	467	—72	—797

(Continued on page 36)



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Rust-Oleum is available in practically all colors, including aluminum and white.

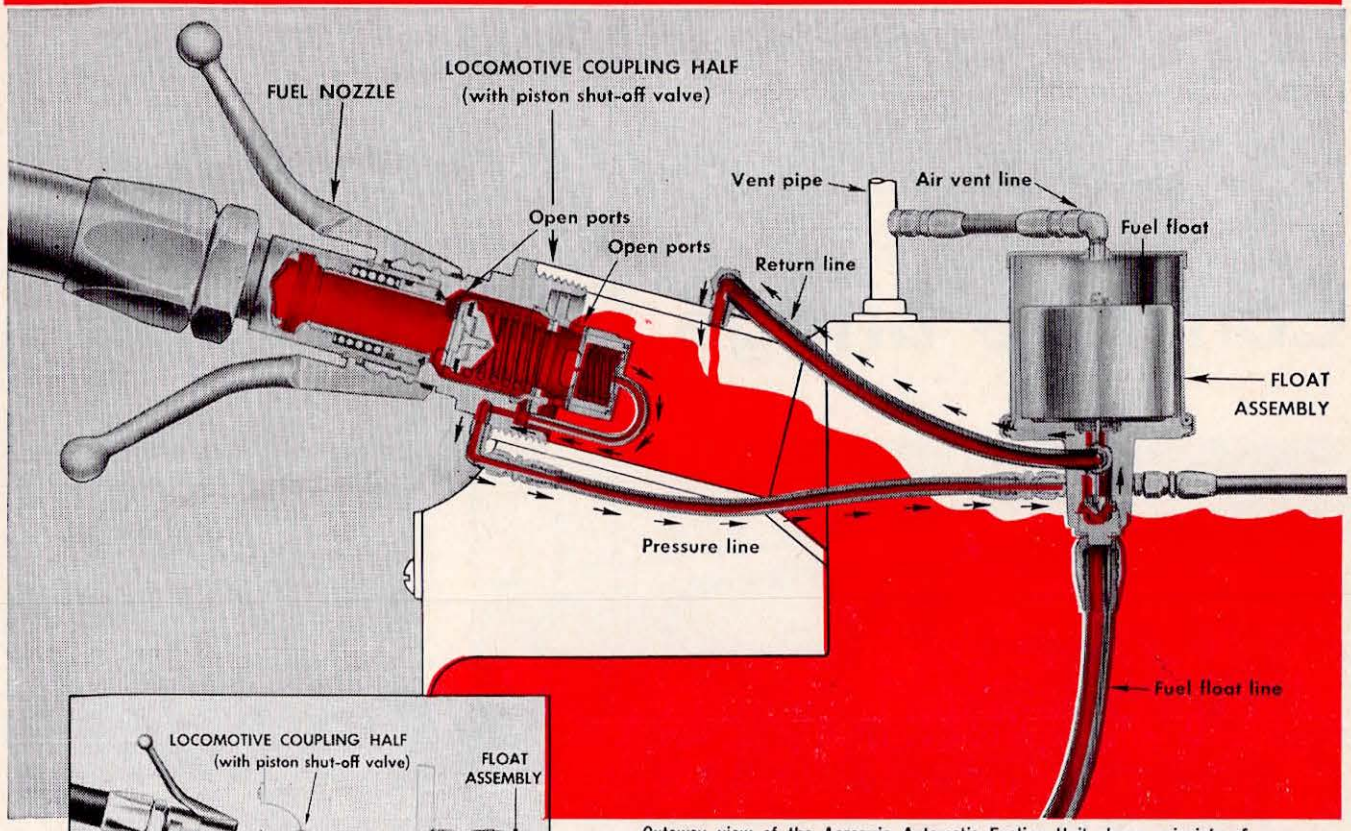
REVENUES AND EXPENSES OF RAILWAYS

(Dollar figures are stated in thousands: i.e., with last three digits omitted)

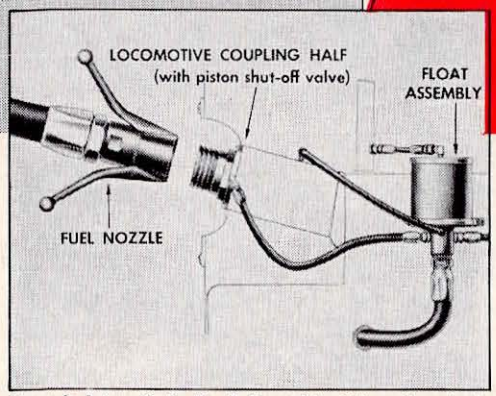
MONTH OF JANUARY OF CALENDAR YEAR 1960

Name of Road	Average mileage operated during period	Operating Revenues				Operating Expenses										Operating ratio		Net from railway operation	Railway tax accruals	Net Railway operating income	
						Maint. Way and Structures			Maint. Equipment												
		Freight	Pass.	Total (inc. misc.) 1960	1959	Total 1960	Total 1959	Deprec and Ret re-ments	Total 1960	Total 1959	Deprec. and Retire-ments	Traffic	Trans-portation	Total 1960	Total 1959	1960	1959			1960	1959
Long Island	344	895	4,535	5,619	5,446	798	782	126	1,026	1,090	169	48	2,981	5,081	5,121	90.4	94.0	538	424	—73	—181
Louisiana & Arkansas	746	2,034	36	2,214	2,053	122	153	20	312	270	98	84	711	1,310	1,251	59.2	61.0	904	452	315	296
Louisville & Nashville	5,684	16,444	690	18,655	18,560	2,500	2,567	340	3,758	4,074	1,140	473	7,669	15,349	16,131	82.3	86.9	3,306	2,387	1,091	826
Maine Central	936	2,073	30	2,243	2,274	332	365	28	389	372	84	31	797	1,666	1,816	74.3	79.8	577	273	204	155
Minneapolis & St. Louis	1,391	1,688	....	1,738	1,767	256	257	29	268	277	101	132	604	1,402	1,489	80.7	84.2	336	204	118	124
Minn., Northfield & Southern	77	294	....	313	356	17	17	3	49	39	13	33	86	223	215	71.3	60.3	90	55	27	54
Minn., St. Paul & S. S. Marie	3,222	2,464	42	2,662	3,251	494	501	48	598	753	144	113	1,437	2,835	3,100	106.5	95.3	—172	Cr.115	—163	—168
Missouri-Illinois	172	417	....	420	294	43	52	4	84	93	40	15	118	272	276	64.7	93.9	148	123	74	26
Missouri-Kansas-Texas Lines	2,918	4,194	76	4,607	4,832	391	455	60	1,044	939	262	178	1,686	3,512	3,525	76.2	72.9	1,095	351	275	334
Missouri Pacific	9,413	20,438	961	23,553	23,794	2,662	2,720	311	4,369	4,275	1,133	705	9,441	18,187	18,486	77.2	77.7	5,367	1,754	2,457	2,359
Monon	541	1,445	29	1,577	1,563	201	208	21	283	296	76	103	651	1,343	1,437	85.2	91.9	234	124	31	27
Monongahela	177	551	....	554	377	71	63	13	55	59	11	1	153	290	496	52.2	131.6	265	79	142	—246
New York Central	10,361	44,076	6,080	58,387	56,510	5,623	6,378	1,067	11,250	10,700	2,448	1,094	26,997	47,999	49,961	82.2	88.4	10,388	5,878	2,610	—138
Pittsburgh & Lake Erie	220	3,237	36	3,447	2,630	369	359	55	737	946	333	65	1,204	2,693	2,697	78.1	102.5	753	889	1,151	777
New York, Chicago & St. Louis	2,170	12,538	152	13,116	11,875	1,244	1,328	160	2,131	2,040	478	353	4,900	9,128	9,127	69.6	76.9	3,988	1,890	1,372	1,123
New York, New Haven & Hartford	1,762	6,143	3,714	11,414	11,761	1,307	1,251	277	1,825	1,927	538	266	5,905	10,254	10,499	89.8	89.3	1,160	1,066	—1,380	—1,168
New York Connecting	21	311	....	330	347	65	73	25	14	14	....	....	103	186	178	56.2	51.2	145	89	35	70
New York, Sus. & Western	100	298	16	330	325	45	40	6	50	61	11	9	160	295	318	89.6	98.0	34	34	—44	—62
Norfolk & Western	2,743	20,291	191	21,323	21,197	2,218	2,220	410	3,457	3,587	1,473	367	5,701	12,500	13,093	58.6	61.8	8,822	4,708	5,571	5,025
Norfolk Southern	592	682	....	694	711	150	174	14	133	125	40	51	251	647	676	93.3	95.0	47	54	—8	—40
Northern Pacific	6,828	11,043	429	12,574	13,401	1,752	1,579	285	2,898	2,840	789	414	6,019	12,013	11,742	95.5	87.6	562	1,453	—783	476
Northwestern Pacific	328	868	....	877	991	209	225	20	77	80	3	6	308	630	681	71.9	68.7	246	81	—20	62
Pacific Electric	355	843	....	952	1,114	184	227	24	39	55	4	22	516	863	927	90.6	83.2	89	152	—187	—69
Pennsylvania	9,895	59,101	9,664	77,303	71,281	7,258	7,186	1,459	15,058	15,215	2,957	1,217	34,993	62,956	62,817	81.4	88.1	14,347	6,183	2,513	—1,737
Penn-Reading Seashore Lines	338	550	49	620	545	170	182	25	113	130	26	9	478	823	856	132.7	157.2	—203	77	—461	—527
Piedmont & Northern	126	464	....	478	482	43	47	5	33	31	10	33	95	242	236	50.6	49.1	236	116	62	74
Pittsburgh & West Virginia	132	822	....	830	702	144	131	31	154	159	45	77	227	659	663	79.5	94.4	170	77	71	46
Reading	1,303	8,490	482	9,588	8,778	1,116	1,012	192	1,929	1,737	480	187	4,278	8,004	7,573	83.5	86.3	1,584	589	542	606
Richmond, Fred. & Potomac	118	1,378	493	2,161	2,053	170	156	28	303	299	67	26	744	1,400	1,434	64.8	69.8	761	446	235	182
Rutland	391	322	....	347	377	68	77	9	62	62	18	27	154	337	358	97.1	95.0	10	30	—21	—15
St. Louis-San Francisco	4,558	8,533	215	9,457	9,369	1,504	1,573	186	1,608	1,708	606	352	4,029	8,154	8,084	86.2	86.3	1,303	500	680	535
St. Louis-San Francisco & Texas	143	413	2	432	430	32	22	4	36	30	1	22	156	260	239	60.3	55.6	172	55	43	58
St. Louis Southwestern Lines	1,554	5,341	1	5,407	5,383	555	598	81	666	664	205	181	1,835	3,426	3,449	63.4	64.1	1,981	836	869	847
Savannah & Atlanta	144	312	....	328	310	49	52	2	61	62	19	17	114	255	250	77.8	80.7	73	30	30	34
Seaboard Air Line	4,147	11,872	1,341	14,327	14,027	1,725	1,781	202	2,567	2,550	728	475	5,040	10,511	10,504	73.4	74.9	3,816	1,896	1,588	1,676
Southern Railway	6,267	19,589	992	22,146	21,690	2,622	3,502	308	3,625	3,736	996	497	7,407	15,355	16,182	69.3	74.6	6,792	3,001	2,893	2,455
Alabama Great Southern	328	1,218	43	1,402	1,415	251	256	35	291	296	81	41	528	1,210	1,169	86.3	82.6	192	92	19	110
Cinn., N. O. & Texas Pacific	337	2,854	88	3,150	3,336	584	551	71	721	710	224	83	936	2,509	2,406	79.6	72.1	641	278	459	608
Georgia Southern & Florida	397	742	41	868	916	167	130	11	73	73	10	23	252	571	533	65.7	58.1	297	60	40	105
New Orleans & Northeastern	203	706	34	803	922	176	171	24	205	203	91	28	280	764	724	95.1	78.6	39	91	7	93
Southern Pacific	8,065	36,923	2,052	41,871	41,405	4,988	4,810	488	9,581	8,791	2,557	748	16,637	34,052	33,218	81.3	80.2	7,818	4,042	3,464	3,737
Texas & New Orleans	4,093	9,940	268	10,787	11,280	1,755	1,834	146	1,660	1,634	205	234	4,197	8,431	8,567	78.2	75.9	2,357	983	303	546
Spokane International	150	218	....	227	213	38	32	3	27	33	10	4	61	141	146	62.0	68.6	86	39	24	21
Spokane, Portland & Seattle	936	2,173	85	2,421	2,755	350	431	56	501	618	129	43	1,046	2,082	2,217	86.0	80.5	339	247	—18	222
Tennessee Central	284	294	....	316	364	49	36	5	57	58	21	15	124	268	264	84.8	72.6	48	26	—22	31
Texas & Pacific	1,828	5,361	320	6,233	6,720	736	746	99	1,068	1,119	281	230	2,625	5,046	5,177	80.9	77.0	1,187	497	239	395
Texas Mexican	161	205	....	221	236	53	53	6	33	32	11	12	82	202	202	91.3	85.6	19	13	—10	—7
Toledo, Peoria & Western	239	593	....	615	586	69	65	7	50	54	13	51	171	380	376	61.8	64.1	235	100	58	56
Union Pacific	9,742	34,519	1,984	39,289	40,922	4,593	5,109	709	7,920	8,245	2,369	1,389	14,802	30,965	31,701	78.8	77.5	8,324	5,318	1,460	2,379
Virginian	Merged into Norfolk & Western Railway effective December 1, 1959.																				
Wabash	2,392	7,944	422	9,239	9,639	893	1,200	100	1,421	1,437	474	354	4,392	7,516	8,073	81.3	83.8	1,723	682	310	399
Ann Arbor	294	779	....	785	705	80	82	2	170	158	45	34	374	679	661	86.5	93.8	106	57	27	—19
Western Maryland	843	4,406	....	4,513	3,939	627	576	55	845	849	301	119	1,374	3,189	3,112	70.7	79.0	1,324	789	936	681
Western Pacific	1,188	3,759	157	4,006	4,235	524	491	78	674	690	227	246	1,609	3,391	3,257	84.7	76.9	615	350	270	492
Wisconsin Central	1,031	2,302	14	2,458	2,418	322	299	60	392	454	111	107	1,198	2,163	2,181	88.0	90.2	295	200	—150	—41

Eliminate Fuel Waste! Cut Fuel Costs 1% to 2%!
Do Away with Costly Separators!
WITH THE AEROQUIP AUTOMATIC FUELING UNIT



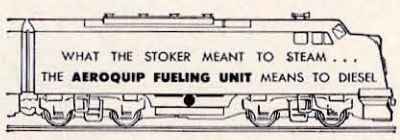
Cutaway view of the Aeroquip Automatic Fueling Unit shows principle of operation. Fuel pressure has opened the shut-off valve piston in the locomotive coupling half. The piston remains open for full fuel flow as long as the pilot flow continues through pressure and return lines. When float at right reaches cut-off level, this pilot flow stops and piston closes shut-off valve.



Aeroquip Automatic Fueling Unit consists of these three basic parts: self-sealing fueling nozzle, locomotive coupling half with piston shut-off valve, and float assembly.

The rugged Aeroquip Automatic Fueling Unit saves its entire initial cost in 6 to 18 months, depending on local conditions. It is designed to provide fully automatic refueling for all diesel locomotives. Road tested for two years, it has proved completely safe and dependable. Performance features include high flow rate to 300 g.p.m., full-tank refueling without hand topping, elimination of overflow and spillage. The Unit is a complete, low-cost package that is compatible with existing fueling systems, installs in 1 to 3 hours and requires minimum maintenance. For complete details, call your Aeroquip Sales Representative or write for new Bulletin 624.

Dependability and versatility of the Aeroquip Automatic Fueling Unit has been proved by two years' road service.



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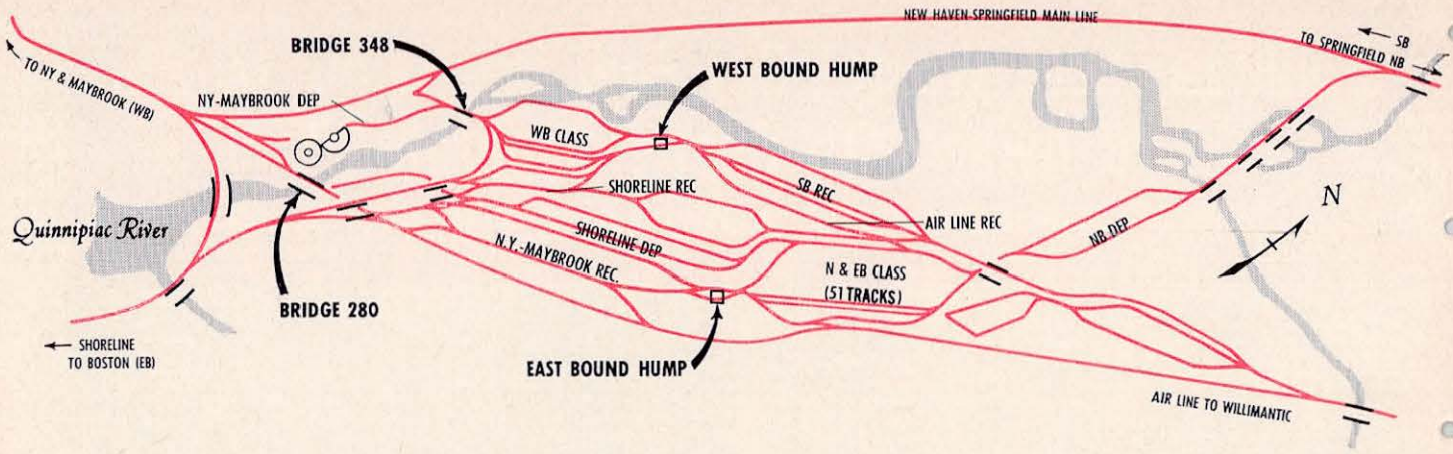
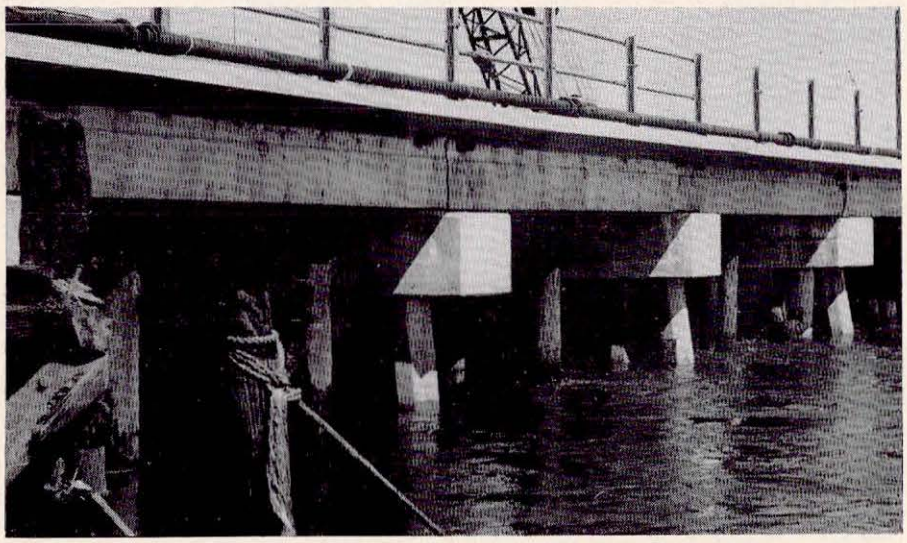
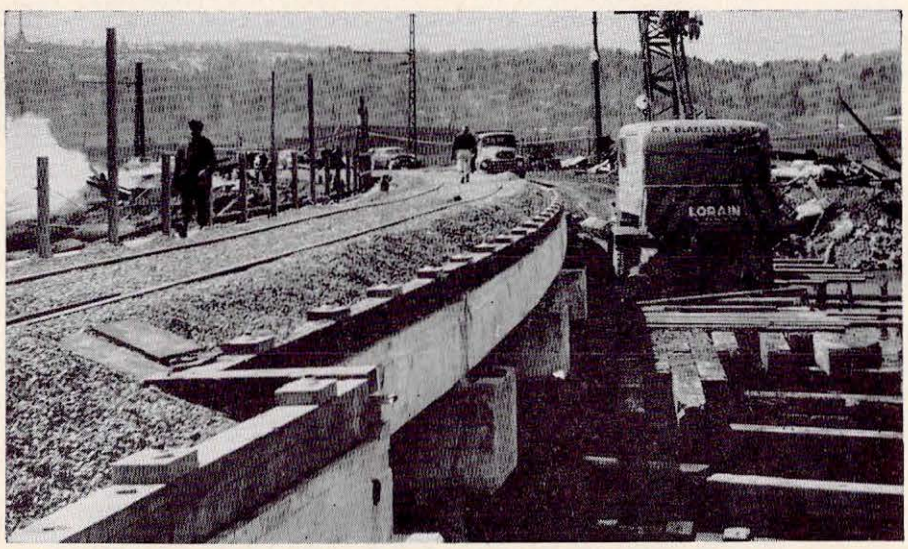


KEY POSITION of Bridge 348 is shown in this diagram.

Concrete Bridge Goes Up Fast



CONCRETE PILES AND BEAMS support new New Haven Bridge 348 at Cedar Hill yard. Bridge was completed seven weeks after first pile was driven.



LINKING WB DEPARTURE YARD to WB classification yard, 288-ft. bridge plus 112-ft gravel fill replace a 400-ft timber trestle destroyed by fire last summer.

► **The Story at a Glance: If your main classification yard is tucked into the curve of a river and linked to the main line with bridges, loss of even a small bridge can raise major management questions:**

- **Are there acceptable detour routes within the yard?**
- **Can operations continue with reduced yard capacity?**
- **Is it less costly to accept some train delays or to build a new bridge?**
- **If a new bridge is to be built under bad weather and tide conditions, what is the most economical method of construction?**

Faced with these questions, the New Haven found:

(1) That by using only one of two humps, operations could continue without a new bridge.

(2) But, expenses and inconveniences piled up.

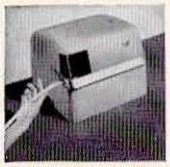
(3) So a decision was made to install a pre-stressed, pre-cast concrete span, and on March 28, Bridge 348 was re-opened for service.

The New Haven's Cedar Hill Yard (New Haven, Conn.) sits in the bends of the Quinnipiac River, a meandering tidal stream (see map). When, in August 1959, fire destroyed Bridge 348 linking westbound classification and departure yards, NH had a problem.

Cedar Hill is the cornerstone of New Haven freight operations. It is the only hump yard on the system. Equally important, it is at the crossroads of major east-west and north-south routes. Save for some flat switching at Providence, R.I., and Maybrook, N.Y., virtually all cars that enter or leave the New Haven are classified in this central yard.

(*Continued on page 45*)

Teletype machines help cut costly paperwork



Typing Tape Punch

Tape Reader

Send-Receive Page Printer

Automatic Send-Receive Set

A Teletype machine equipped with a simple sprocket-feed mechanism can handle multi-carbon forms as readily as the more familiar plain paper on which messages are transmitted. Thus distances can be bridged not only with information, but with information that is preprocessed, ready to go to work.

Teletype printers handle a wide variety of multi-copy forms. Moreover, the usefulness of this technique can be further extended with Teletype tape punching and reading equipment—which can capture, store and utilize repetitive data to further mechanize paperwork procedures.

For more information about Teletype Model 28 equipment, please write to Teletype Corporation, Dept. 45D, 4100 Fullerton Ave., Chicago 39, Illinois.

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Autos Go Flexi-Van, Detroit-to-N.Y.

With the arrival of 12 specially designed Flexi-Van automobile carriers in New York last week, Chrysler Corporation became the first manufacturer to piggyback automobiles from Detroit to the New York City area. The shipment of 44 Valiants and four Dodges left Detroit via New York Central on April 12. Arriving at New York Central's Bronx Flexi-Van terminal at High Bridge on the morning of April 14, the new cars were in the hands of dealers that afternoon.

Chrysler's director of traffic, Paul G. Fritzching, Jr., said of the movement, "This is the first of a series of test shipments by Flexi-Van. If these movements prove successful over a period of several weeks, we will consider further applications to New York and other areas."

Noting that Flexi-Van was completing its second year of operation, New York Central Vice President, Freight Sales & Service, A. E. Baylis commented: "This first automobile shipment is an important step forward for Flexi-Van, a major breakthrough both for the Central and for our automobile producing customers . . . The service has shown a steady growth since its introduction two years ago."

Mr. Baylis added that in 1959, NYC carried 23,363 Flexi-Van loads, nearly five times the 4,873 carried in 1958. And, he said, results for the first two months of 1960 show a continuing growth. Interchange agreements with five other roads are now in effect, Mr. Baylis said, with a sixth road, the Louisville & Nashville, scheduled to join Flexi-Van ranks soon.

Railroading After Hours with Jim Lyne

WHAT'S A CITY FOR?—There's a lot of appropriate worrying going on, about the actual or potential decay of big cities at their very center—with shopping areas and companies with a lot of employees moving to the suburbs.

The reason, of course, is profligate construction of highways around the cities—tending to reduce traffic and earnings of commuter and transit lines, causing them to shrink their service, thereby diverting more traffic to the highways and creating more congestion. To save the city centers, suburban and urban transit must be improved and extended—and commuting by auto minimized.

Why save the big city centers? The reason is that you can see more people you need to see in a day, in a place like Chicago's loop, than you could see in a week if each of them were stuck out in the suburbs 30 miles apart.

GAS TAX FOR TRANSIT—I see where an aspirant for the Democratic nomination as governor of Illinois has come out for using a part of the gasoline tax for "urban and suburban mass transportation . . . to relieve the unbearable and unending pressure on streets and highways."

Why not? When I pay gasoline taxes what I'm paying for is highway space. If part of what I pay is used to make transit service more attractive—then maybe there'll be more highway space for me that way than if all the gas tax is whooped off on building more highways.

BUT IS IT PROGRESS?—I see that the GM&O has been forced to pull off the last remaining passenger train on its line across Missouri into Kansas City. As recently as the time of World War II there were four passenger trains in each direction on this line—and away back in 1910 there were seven in each direction.

This line (then the Alton), prior to World War I, was justly famous in its territory for the quality of its passenger service—in particular for the way it kept its equipment spic and span, for the courtesy of its employees, and for its insistence that firemen "fire white smoke."

There are some good sized towns on this line that now have no common carrier passenger service at all. You go there by private auto or taxi, or you don't go. Our country is hothousing private transportation and discouraging common carriers. Even if this is progress, I'm still against it.

KNOWING THE PROFS—We had a piece here (March 7, p. 42) about railroad relations with universities—suggesting that not all railroads are as close to their local educational institutions as they might be, to their mutual advantage.

Well, now, Professor William K. Schusler of Duquesne University in Pittsburgh tells me I can quit worrying—at least as far as the Pittsburgh railroads and his University are concerned. Relations of Duquesne with local railroads are those of "complete cooperation." Railroads provide guest lecturers, arrange for tours of railroad facilities, and help scholars who are doing research in transportation.

I knew, of course, that this happy situation exists in some places—but not everywhere.

CONTRACT OR VOLUME RATES?—A shipper asked a railroad friend of mine: "Why do you want contract rates or 'agreed charges' when the ICC already lets you make volume rates? What's the difference?"

"The difference," my friend says, "is the difference between hope and assurance. We make volume rates and we hope you will use them. I personally would rather have a contract with you."

FLIER PREFERS TRAINS—One of my colleagues tells me of a test pilot for one of the big aviation supply companies, who will not fly on commercial airlines because they won't let him wear a parachute. He insists on going by train. The company authorizes travel by air only. So this pilot has to cut into his vacation time and pay any difference in rates out of his own pocket, in order to feel safe when he travels.

I have heard of this before—people in the airplane business who won't fly, like the barkeep who never touches the stuff.

EXIDE-IRONCLAD BATTERIES MEAN MONEY SAVED

In Carlighting. You can save up to 616 lb. deadweight per car and still get the power you need with an EG Exide-Ironclad Battery. Use your fuel to pull passengers, not excess weight.

In Diesel Locomotives. New MGD Exide-Ironclad positive plate construction retains active material better—prolongs battery life. Design unlocks more power for greater economy. Batteries now need less space, give new versatility for application in different size locomotives. One size battery will fit all locomotives.

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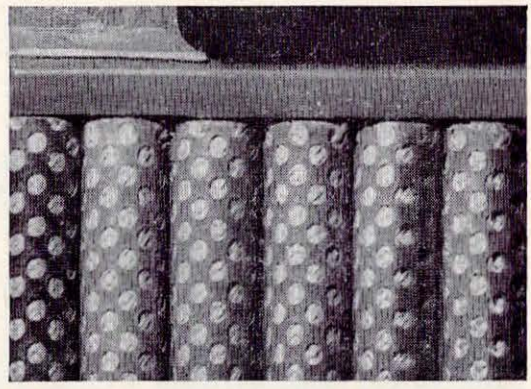

Here's the Secret. The new improved Exide-Ironclad tubular positive plate. Unlocks even more power per ounce of active material than in the past. Gives you more capacity per cubic inch of space and longer battery life for greater economy.

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These chemicals, as well as our special application service and equipment, are backed by almost a half century of extensive railroad weed control experience.

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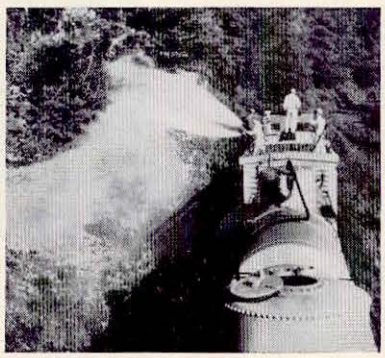


New TOFC Breakthroughs Seen

Piggybacking, the continuing source of new ideas in transportation, may be on the threshold of new breakthroughs.

Morris Forgash, president of United States Freight Co., spelled out some of them in a speech to the Traffic Club of New York on April 7.

As Mr. Forgash sees it, piggybacking in 1960 will move railroads toward faster freight schedules, more combined freight-passenger service and increased study of equipment standardization.

Moreover, according to Mr. Forgash, the "inevitable" development of an all-purpose container for piggyback service will solve the toughest economic problem in transportation—empty car and truck mileage.

On faster freight, combined service and equipment standards, Mr. Forgash said:

- "I predict we will have 50-hour service, Chicago to the Pacific Coast, and 65-hour service to the coast from New York by the end of 1960." Progress in this direction is being made even faster than he had supposed, he said.
- "Reasonably priced rail piggyback service, at speeds which are entirely feasible, can hold its own with the best that can be produced for long distance over the best superhighways or in the air, even in a jet age."
- "A combined freight-passenger service, already functioning in certain places, can reduce the overall passenger deficit . . . Passengers have never objected to riding in the same train with baggage and express. Why should they object to riding in the same train with freight moving in containers—especially if it insures a payload that will keep the passenger service going?"
- "Empty car mileage will never be entirely eliminated because some freight always will require specialized equipment that cannot be used in the return direction. But the enormous waste of carrier resources and shipper dollars can be reduced if we devise equipment that has the absolute maximum of utility."

Mr. Forgash went on to say he believes an all-purpose container could reduce empty car-miles by at least 50%.

He said, for example, that one refrigerator car line has decided to use trailers to compete for citrus traffic from Florida. If these trailers were piggybacked empty on the return haul the movement would not be feasible; but his own company is considering working with this car line to provide return loads.

Equipment suitable for such multiple uses is already past the "dream" stage, Mr. Forgash added.

"On the drawing board and just about to emerge is a trailer carrying the all-purpose concept even a step further," he said. "Insulated and refrigerated, this trailer will hold four large or six small automobiles. It will carry a collapsible rubber tank with 4,300 gallon liquid capacity. It will carry dry freight, perishables—or various combinations of all these items.

"Obstacles to the use of this all-purpose equipment ought to be brushed aside like cobwebs because the results in terms of elimination of waste, reduction in empty haulage, encouragement to coordination, flexibility of transportation and economy to the country outweigh all other considerations."

N&W, NKP Continue Merger Talks

Merger discussions between the Norfolk & Western and Nickel Plate should indicate "in the not too distant future whether an acceptable arrangement can be worked out." That's what N&W President Stuart T. Saunders reported at his road's 35th annual Better Service Conference.

The conference, held April 8 and 9 in Roanoke, Va., was attended by about 600 N&W employees and guests of the road. The employees were delegates representing Better Service Clubs throughout the N&W system.

Mr. Saunders said it was too early to determine what results of the N&W-NKP talks would be. At the same time, he reported that "good progress" had been made, and that the talks were "continuing on a very active basis."

Meanwhile, the N&W president expressed his general belief that "there are too many railroads," and that "appropriate combinations" of existing lines "offer one of the best assurances that the railroads will remain the backbone of the nation's transportation system." He thinks this applies particularly to "high density roads which are in a position to take full advantage of technological advances and operate with maximum efficiency."

By the same token, Mr. Saunders also thinks a "substantial mileage" can't be saved. He explains: "The prospects for cost reduction on lightly travelled lines are not particularly good, since effective utilization of much of our modern cost saving equipment depends upon reasonably high traffic levels."

As this indicates, Mr. Saunders does not think the merger route is the way out of difficulties for all railroads. Each case must stand alone, he says. That's also his answer to the question of whether roads should enter merger plans only from positions of strength —or whenever at least some gain is indicated.

The N&W president does not subscribe to recent reports saying railroad executives are "not impressed" by current merger talks. He finds the industry's leaders now giving more thought to mergers than they have for some time. And he thinks statements of the ICC and individual commissioners amount to strong encouragement for a merger movement.

If a proper public relations job is done, Mr. Saunders doesn't think merger plans would be thwarted by the opposition of railroad unions and communities that might be affected. Both of these, and other affected interests, would be benefited in the long run, he explains.

Mr. Saunders calls the merger of the former Virginian into the N&W a "natural." He believes it set a precedent which will influence future policy of the ICC.

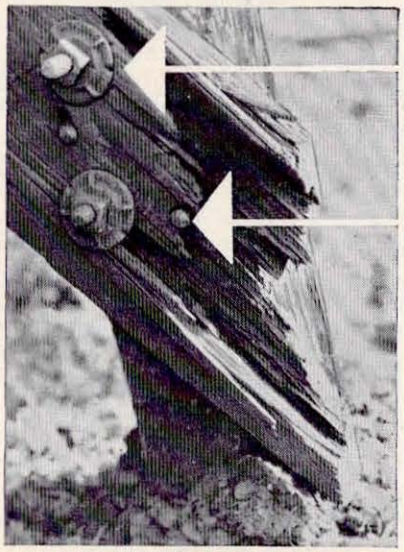
"The soundness of the arrangements," he says, "provided a pattern which won government approval in a remarkably short time, considering the lengthy hearings and litigation which are so often associated with many cases of this type.

"It was no accident that this merger moved forward rapidly from the first. A great deal of careful planning and hard work paved the way for its successful consummation."

Other speakers at the conference included three N&W vice-presidents—John P. Fishwick (law), Robert N. Woodall (traffic), and H. C. Wyatt (general manager). Mr. Wyatt made a progress report on physical changes involved in the N&W-Virginian merger. He mentioned more than 20 separate projects which are taking "thousands of man-hours and millions of dollars to weld us into one railroad."

MARKED FOR REPLACEMENT

BUT IT COULD HAVE BEEN SAVED



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SERVING RAILROADS SINCE 1935

People in the News

AKRON, CANTON & YOUNGSTOWN.—Cal P. Fenton, general agent, Portland, Ore., appointed district traffic manager at St. Louis, Mo. Mr. Fenton succeeds to the territory previously covered by **Albert J. Wissel,** retired district traffic manager at Cincinnati, Ohio. **Rudolph E. Schroeder** succeeds Mr. Fenton.

CANADIAN NATIONAL.—Samuel Hibner, superintendent sleeping, dining and parlor car department, central region, Montreal, Que., transferred to the western region, Winnipeg, Man., succeeding **Charles A. Wilson,** retired.

ERIE.—Francis L. Collins, general agent, Newark, N. J., retires April 30.

FLORIDA EAST COAST.—J. Sims, master mechanic, Miami, Fla., appointed general master mechanic, Bowden Shops, South Jacksonville, Fla.

FRISCO.—L. A. Thomas appointed terminal trainmaster, Memphis, Tenn. **B. C. Davidson** named trainmaster-roadmaster, Springfield, Mo.

ILLINOIS CENTRAL.—L. R. Clayton, trainmaster, Tennessee division, Memphis, transferred to Freeport, Ill., to replace **N. L. Meadows, Jr.,** assigned other duties. **L. Hogan, Jr.,** trainmaster, Bluford, Ill., named to succeed Mr. Clayton, and in turn is replaced by **R. L. Warren,** transferred from Jackson, Miss. Mr. Warren's successor is **J. P. Moran. M. E. Corzine** appointed trainmaster, Tennessee division, Memphis, to replace **B. M. Foreman,** assigned other duties.

H. L. Williams appointed assistant to general superintendent transportation — special assignment, Chicago.

LACKAWANNA.—R. S. Bird, assistant comptroller, New York, retired April 1.

MISSOURI-KANSAS-TEXAS—Thomas D. Flanigan, sales manager, Salt Lake City, named to the newly created position of regional sales manager, San Francisco.

NORFOLK & WESTERN.—Lawrence T. Forbes, general agent, Beckley, W. Va., appointed district coal traffic manager there, a newly established office.

SANTA FE.—Titles of **G. B. Dreisbach** and **R. C. Mock,** supervisors of freight claim prevention, Topeka, Kan. and Amarillo, Tex., respectively, changed to supervisors of better freight handling.

SOO LINE.—Charles S. Pope, vice president personnel, public relations and safety, Minneapolis, Minn., retired April 1. **Wallace W. Abbey,** assistant to vice president—public relations, Minneapolis, Minn., appointed director of public relations. Mr. Abbey will be in charge of the company's public relations and advertising programs.

SOUTHERN PACIFIC.—J. N. Albertson appointed assistant general superintendent of communications—system, San Francisco.

Richard E. Wedekind, general attorney, San Francisco, retired.

TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS.—Arthur G. Harlan appointed signal supervisor, succeeding **J. E. Tendick,** retired.

WABASH.—Earl C. Perkins, assistant freight traffic manager, St. Louis, named traffic manager, Northeastern territory, with headquarters at Detroit, Mich.

WESTERN MARYLAND.—Robert H. Kirckhoff appointed freight service manager, Baltimore, Md.

Supply Trade

Bernard C. Yearley, assistant to vice president, **National Malleable & Steel Castings Co.** of Cleveland, has been appointed vice president of the newly formed General Research, Development and Engineering Division.

Louis W. Pingel, Jr., senior special representative, industry sales, eastern region, **IBM Data Processing Division,** has been appointed program administrator — transportation and communication, industry marketing at DPD headquarters in White Plains, N.Y.

Russell L. Bowersox has been named manager—advertising and sales promotion for the Equipment Section of **General Electric Co.'s** Locomotive & Car Equipment Department. Mr. Bowersox will continue his editorship of the company magazine, "Going Places."

Sanford H. Steward, Jr., has been named district sales manager, railroad products, central region of the United States, for **Servo Corp. of America.** Mr. Steward will cover Illinois, Iowa, Minnesota, Missouri and Nebraska.

Dean Morgan has been named Washington, D.C., marketing representative for Servo.

Robert E. Overby has joined **Automatic Electric Sales Corp.** as a staff engineer in the company's carrier and radio sales organization. Mr. Overby was formerly with Illinois Bell Telephone Co.

John S. Gallagher, Jr., former manager, passenger traffic research, **New York Central,** has established offices as a consultant in Philadelphia. Mr. Gallagher will specialize in suburban transit and intercity passenger service problems and in management operations and planning.

William E. Withall has been elected chairman of the board of directors of **Enterprise Railway Equipment Co. Harry A. Withall** has been elected president, and **Harold Harris** named vice president.

Union Switch & Signal—Division of Westinghouse Air Brake Co., has organized an "Automation and Systems Section." The new group, under supervision of **Frank T. Pascoe,** will coordinate design, development and application of automatic control systems in conjunction with other sections of the Research and Engineering departments, in the field of automatic, semi-automatic or remote control for railroad operation.

OBITUARY

Gustav Metzman, 73, who was president of the **New York Central** from 1944 to 1952, died April 11 at Roosevelt Hospital, New York, after a long illness.

Charles E. Miller, 77, retired assistant engineer of maintenance, **Chicago & North Western,** died March 31 in Highland Park Hospital, Highland Park, Ill.

R. W. Richardson, retired division engineer, **Chicago & North Western,** Madison, Wis., died April 1.

NEW HAVEN BRIDGE

(Continued from page 38)

At the time of the fire, 40 daily scheduled freights moved through Cedar Hill's two humps—9 to and from Boston, 10 to and from Springfield, 7 to and from Bay Ridge (New York City), 6 to and from Oak Point (New York) and 8 to and from Maybrook. In addition, there were local freights on the eight routes in and out of Cedar Hill.

Cedar Hill was built (in the '20's) with considerably more capacity than is normally required today. The first reaction of New Haven management to the loss of the westbound yard bridge was to shift operations to the eastbound yards. Double-tracked Bridge 280 became the main route between the yard and New Haven, and the westbound hump was closed down.

In several months of test operation, it became apparent that there were some advantages in consolidating all operations on the east side of the yard. It also became apparent that the advantages were offset by train delays. Overtime to road crews alone helped wash out potential savings.

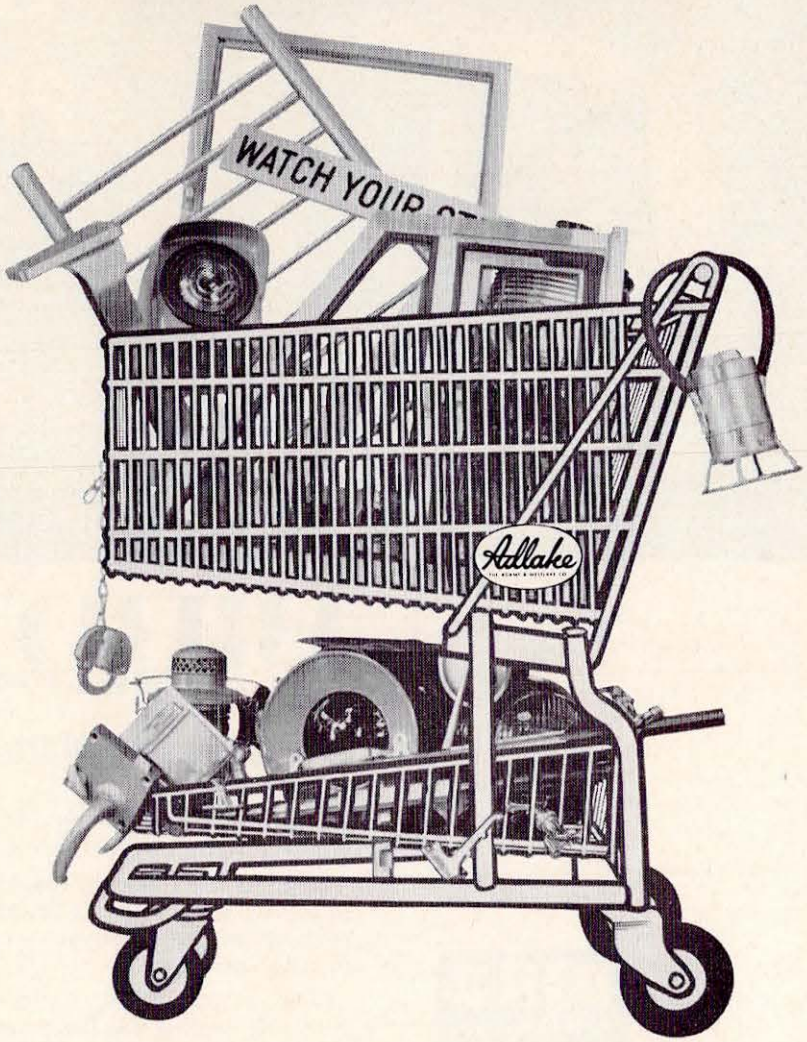
When F. J. Orner moved up as new chief of operations (RA, Feb. 1, p. 32), one of his first acts was to order a replacement for Bridge 348. The engineering department, which has responsibility for 80-odd timber trestles crossing similar tidal streams, was ready with plans for a pre-stressed, pre-cast concrete structure. Although new to New England, this method of construction has been used successfully elsewhere (RA, Jan. 18, p. 109).

With design and supervision remaining the function of NH Chief Engineer H. W. Jenkins and his associate, A. E. Cawood, the construction contract went to C. W. Blakeslee & Sons of New Haven.

To form a 15-ft deck for ballast and trackwork, five pre-stressed box beams, three-ft wide, were laid side by side. Seventy-six such beams completed the 288-ft deck. Supporting the structure, 101 pre-stressed concrete piles 80 and 90 ft long, were driven into clay subsoil. Single-track in its present form, the bridge can be expanded to double track.

There are a number of reasons why New Haven engineers say they like the pre-stressed and pre-cast concrete structure for tidal trestles. The new bridge, because of its resistance to salt corrosion, is expected to have a long service life. Reinforced concrete, of course, eliminates fire hazards. And not least, when the job has to be done in a hurry in winter weather on the New England seaboard, pre-casting saves time. Bridge 348 was completed on March 28, seven weeks after the first pile was driven.

A+ Adlake



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Aside from Adlake's hundreds of catalogued items for the railroad, look to Adlake for *made-to-order* products, too. Adlake has the facilities to extrude, cast, machine, and finish metals . . . fabricate products of glass, cloth, rubber, aluminum, copper, brass and steel. ALL under one roof, Adlake the SUPERMAKER is the industry's "supermarket" among suppliers.

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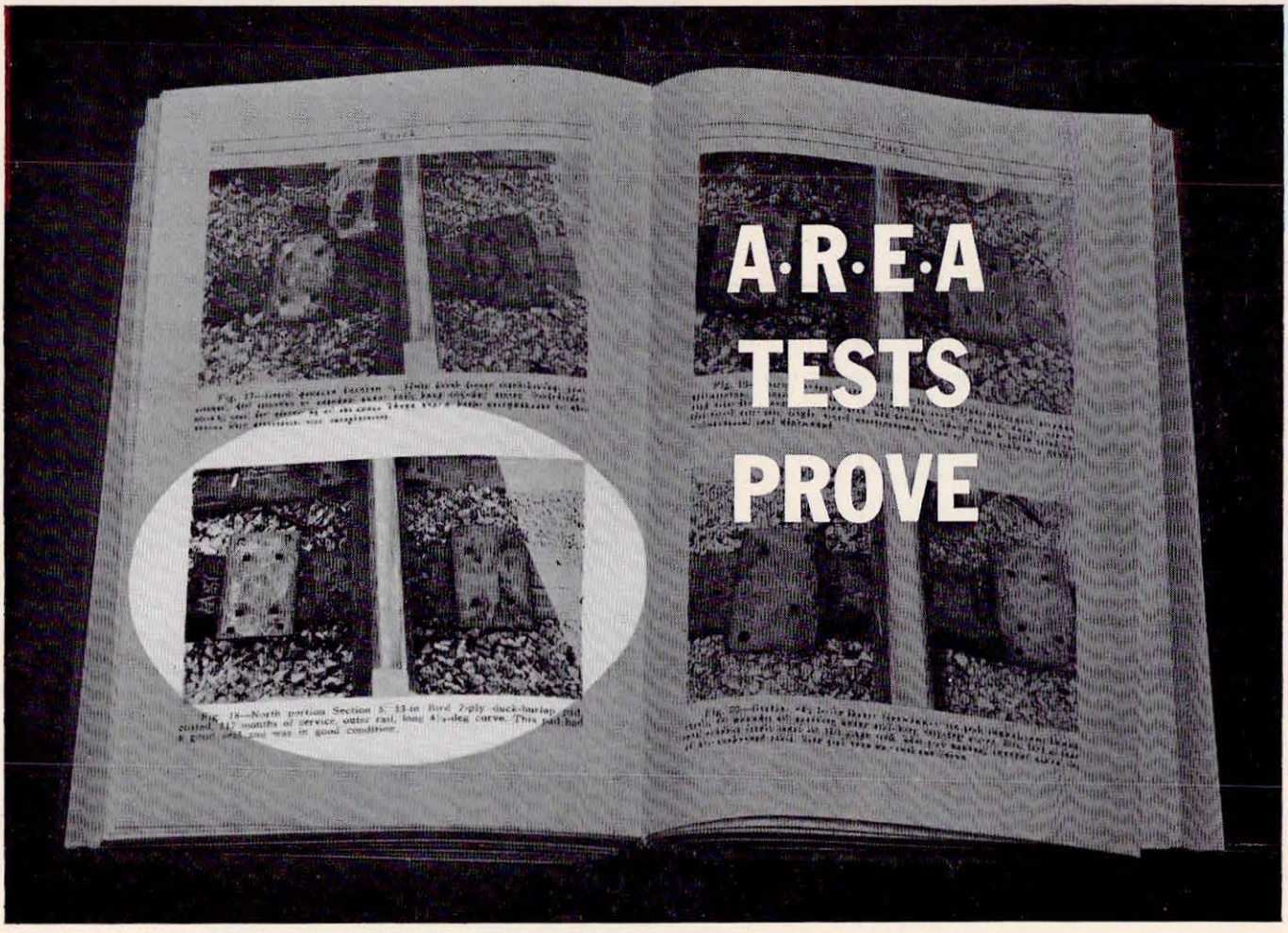

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prevented any plate cutting for 117 months

"Bird 7-Ply Duck Burlap Pad, Coated. 117 months of service, outer rail, long 4½ degree curve. This pad had a good seal and was in good condition."

This unbiased report of the AREA, based on tests conducted on the Louisville and Nashville Railroad near London, Kentucky is further evidence of the effectiveness of Bird Self-Sealing Tie Pads in reducing tie costs.

The underplate wood of this tie is as sound today as it was when the Bird Self-Sealing Tie Pads were installed 117 months ago — moisture and abrasive materials have not penetrated the effective and durable seal of the pad with the tie.

The tie pads themselves are structurally sound and good for many more years of effective service.

Don't take our word for it. See it for yourself on page 820 of the AREA Proceedings, Vol. 60, in a report beginning on Page 800.

BIRD & SON, inc. Established 1795

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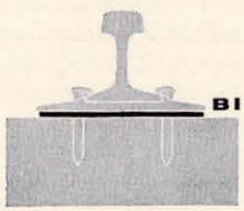


In-track experience proves . . .

BIRD TIE PADS

save up to $1000.00 per mile per year

MARKET OUTLOOK *at a glance*

Carloadings

Loadings of revenue freight in the week ended April 9 were not available as this issue went to press.

Loadings of revenue freight for the week ended April 2 totaled 598,031 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, April 2

District	1960	1959	1958
Eastern	92,001	93,487	80,109
Allegheny	113,630	114,999	89,523
Pocahontas	48,999	46,275	38,247
Southern	117,351	111,055	105,939
Northwestern	64,013	62,683	57,491
Central Western	111,494	113,771	98,251
Southwestern	50,543	48,322	46,687
Total Western Districts	226,050	224,776	202,429
Total All Roads	598,031	590,592	516,247
Commodities: *			
Grain and grain products	51,016	46,717	49,316
Livestock	3,699	5,168	4,773
Coal	98,922	91,610	85,154
Coke	10,909	10,883	5,362
Forest Products	39,660	36,765	33,579
Ore	27,179	21,588	13,869
Merchandise l.c.l.	38,944	43,228	47,214
Miscellaneous	327,702	334,633	276,980
April 2	598,031	590,592	516,247
March 26	600,926	604,392	532,273
March 19	581,477	603,885	532,997
March 12	560,230	596,180	539,127
March 5	557,607	595,475	544,374
Cumulative total, 13 weeks	7,577,596	7,557,753	7,021,024

PIGGYBACK CARLOADINGS.—U.S. piggyback loadings for the week ended April 2 totaled 11,282 cars, compared with 8,072 for the corresponding 1959 week. Loadings for 1960 up to April 2 totaled 134,472 cars, compared with 93,014 for the corresponding period of 1959.

IN CANADA.—Carloadings for the 10-day period ended March 31 totaled 99,747 cars as compared with 67,410 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Mar. 31, 1960	99,747	43,856
Mar. 31, 1959	84,492	40,193
Cumulative Totals		
Mar. 31, 1960	843,968	385,660
Mar. 31, 1959	828,516	355,573

New Equipment

FREIGHT-TRAIN CARS

► *Atlantic Coast Line.*—Ordered 200 70-ton hoppers and 100 50-ton box cars from ACF for September delivery.

► *Colorado & Southern.*—Ordered 10 70-ton Airslide covered hoppers from General American.

► *Detroit, Toledo & Ironton.*—Ordered 120 70-ton hoppers from Greenville Steel Car at a cost of $1,043,400. Delivery is scheduled for June.

► *Northern Pacific.*—Ordered 25 70-ton gondolas from Ortner for delivery third quarter 1960.

SPECIAL

► *March Bad Order Ratio 1.7% Lower Than Last Year.*—Class I roads on March 1 owned 1,675,313 freight cars, 46,487 less than a year ago, according to AAR report summarized below. Bad order ratio was 1.7% lower than March 1, 1959.

	March 1, 1960	March 1, 1959	Change
Car Ownership	1,675,313	1,721,800	—46,487
Waiting repairs	124,969	157,870	—32,901
Repair ratio	7.5%	9.2%	—1.7%

LOCOMOTIVES

► *Indian Iron and Steel Co.*—Ordered ten diesel-electric industrial locomotives (four of 550 hp, six of 275 hp) from General Electric at a cost of over $750,000.

New Facilities

► *Duluth, Missabe & Iron Range.*—Current construction projects include diesel facilities and a 36-car infrared ore thawing plant at Two Harbors, Minn. (RA March 7, p. 40).

► *Missouri Pacific.*—Current projects not previously reported include construction of one-story addition to office building at 7th and Cerre streets, St. Louis, Mo., $124,100; construction of truck-rail facilities at Kansas City, Mo., $243,465, and at Dupo, Ill., $188,500; track, signal and bridge work between Poplar Bluff, Mo., and Newport, Ark., $342,600; and reconstruction of bridges at Hufsmith and Highlands, Tex., and Basile, La., at a total cost of $477,710.

► *Norfolk & Western.*—Is installing CTC on 198 miles of former Virginian tracks between Princeton, W. Va., and Abilene, Va.

► *Santa Fe.*—Ordered CTC equipment from Union Switch & Signal Division of WABCo. for installation between Maine and Seligman, Ariz., 67 miles.

RAILWAY AGE time-saver page

Is Piggyback Standardization

By **JOHN E. WIGHTMAN**
General Manager
Trailer Train Company

Seventy-seven years ago the railroad industry was widely hailed for adopting "standard" time. What the railroads really did, of course, was establish four different time zones for the nation and call the composite result Standard Time.

I believe the many people who today are pressing for "standardization" in rail equipment, particularly piggyback equipment, may do well to keep this historic lesson in mind. It is, I think, the best answer any railroader can give right now to the often asked question: "Is absolute piggyback standardization possible?"

I am sure that we in our company are not alone when we say standardization of equipment is extremely important to continued growth of piggyback transportation. This was one of the three primary objectives of TTX when it was formed four years ago. The others were flexibility through pool operation, and efficiency through high utilization.

However, our standardization goal, as originally conceived, was not solely a mechanical one. It also included an operating consideration aimed at making interchange practical.

Four years ago about 32 railroads were offering some form of piggyback service. Equipment then being used was a good example of the traditional independence of railroaders. There were standard flat cars, modified flat cars, converted gondola cars, and special piggyback cars. Some were end loaded, some were side loaded, and some were loaded by overhead cranes. Tiedowns came in almost as many varieties as there were engineers and designers. Many systems required special attachments, usually different, on the truck trailers themselves. The result was that interchange among the 32 railroads was at best impractical and often completely impossible.

Thus when TTX came into being with the objective of making interchange practical, some standardization was immediately necessary. Railroads had had the practical experience with many designs of piggyback which was a great help.

But in choosing the first equipment, TTX founders set only two fixed principles:

1. Cars should be able to carry every type of trailer in general use in the trucking industry, without modification, and

2. Cars should be designed for end loading from the standard ramps which have been characteristic of railroading for generations.

That these principles were sound is best illustrated by the fact that they have not been changed while the TTX fleet has grown from 400 to more than 4,000 cars.

Many sub-changes have been made, however. The first cars were 50 ft and 75 ft long and had cumbersome jack-and-chain tiedowns. Today 90% of the company's cars are equipped with the ACF hitch which Trailer Train's mechanical committee helped develop. Similarly, guide rails, bridge plates, floor construction, as well as many other features have been improved and refined. Even the length of cars has been changed—all the newest units being 85 ft long.

These modifications, while important, did not alter the concept of interchangeability—that the cars can carry any type trailer, and they can all be loaded and unloaded at the same ramps. Thus, the standardization policy is really one of compatibility rather than arbitrary uniformity. We feel that future developments in piggyback equipment, insofar as possible, should be compatible with the equipment already in use.

Consistent with this policy, TTX is constantly searching for new equipment and improvements in existing equipment, both through the activities of our own mechanical advisory committee and also through equipment manufacturers.

Let me emphasize, however, that our company would welcome greater uniformity in equipment. Certainly we would like to have one type of car design that would carry every piggyback shipment and meet every carrier's individual needs. But the design of such equipment presents many challenges. Six of them are listed at the bottom of this page.

Obviously, no car on the market today meets all these requirements. I hesitate to predict when such a car will be designed. The matter of clearance alone is sufficient to give design engineers a headache. If this problem could be completely solved by some form of depressed floor (and this is not as simple as it sounds), would the resulting car be efficient for containers? The question of whether the car should carry one or two trailers is complicated by the possibility that longer trailers may come into widespread use.

These are just a few of the obstacles which challenge any designer trying to build a "universal" piggyback car today. Nevertheless, the future potential of piggyback as a substantial form of traffic for railroads certainly would seem to make this challenge worth accepting.

In the four years since Trailer Train was founded the number of roads offering piggyback has grown steadily. At the same time, variations in design of piggyback equipment have greatly decreased. Today the AAR reports there are about 11,000 piggyback cars in service or on order. Thirty-eight per cent of these are TTX cars, and an estimated 30% are individually owned but compatible with our design. This means that almost 70% of the total fleet is suitable for interchange operations—a vast improvement over the situation four years

6 WAYS TO A STANDARD PIGGYBACK CAR

1. It must be able to carry conventional highway trailers of all types—present and future—without modification;

2. It must be able to carry conventional containers and/or demountable bodies;

3. When loaded, the car must be low enough and narrow enough to meet all overhead and curve clearance restrictions;

4. It must provide maximum operating efficiency in terms of loading, unloading and other terminal costs;

5. It must be economical to build and maintain, and

6. It must be compatible with at least the majority of piggyback equipment now in use.

Possible?

ago. The remaining cars are chiefly assigned to captive operations on individual roads. While these cars may be relatively efficient so long as the operation remains captive, I am convinced the growing volume of interline piggyback movements is going to sharply limit the developments of non-compatible equipment in the future.

Trailer Train's mechanical committee will actively continue research into further improvements in design of piggyback equipment. We are presently working on lower-level designs which may meet most of the clearance restrictions now facing some of our members. New designs, however, must be compatible with our existing equipment so there will be no sacrifice in efficiency or flexibility when such cars are added to our fleet.

It is our hope that the varied needs of railroads for piggyback equipment will ultimately be fulfilled by a minimum number of car designs, all compatible with one another. The challenges are many, but if creative engineering is backed up by far-sighted management the rewards to the entire railroad industry can be almost limitless. In this sense, the eventual standardization in piggyback equipment may become as great an accomplishment as was the adoption of "standard time" by the railroads.

Florida Passenger Traffic Up Sharply in First Quarter

Passenger chiefs of both the Seaboard Air Line and the Atlantic Coast Line report fat increases in passenger traffic to and from Florida for the first quarter of 1960—and both are confident they're getting back a lot of travellers who temporarily defected to the airlines.

For the first 10 weeks of the year, Seaboard passenger business was running 18% over 1959 (which itself showed a 9.5% increase over 1958).

Meanwhile, Coast Line's New York-Florida "East Coast Champion," "West Coast Champion" and "Florida Special" are running 20.6% ahead of 1959. And the "City of Miami" and "South Wind" are coming into Florida from Chicago with loads running 7.2% above last year.

Says Seaboard GPTM J. R. Getty: "People are discovering there's a better way to get to Florida than being shot through the air in a galvanized ashcan."

Editors Afield

IOWA CITY, IOWA

I have just had a unique and somewhat confusing experience. The itinerary goes like this:

- March 27-30—Attended Railroad Public Relations Association seminar on public—labor—management relations at Highland Park, Ill.
- April 5-6—Covered opening of arbitration hearings in BLE wage case.
- April 7-8—Sat in on operating brotherhoods' institute on labor-management problems at the University of Iowa.

Unique? Well, to the best of my knowledge, Railway Age was the only organization represented at all three gatherings.

Confusing? More than a little. Seldom have I heard men describe essentially the same problems in essentially the same language—and arrive at almost totally dissimilar conclusions.

Industry solvency—or the lack thereof—is probably the outstanding example. On April 5, Howard Neitzert, counsel for the carriers, told the BLE arbitration board that a sizeable segment of the industry can't afford to pay existing wage rates, let alone an increase. The record, he said, shows that 25% of Class I roads posted net income deficits in one or both of the past two years.

Just three days later, Eli Oliver, economic adviser to the brotherhoods, mounted the rostrum at Iowa City and declared flatly that "there is just no truth to the railway corporations' constant plea of poverty."

If one salient impression emerged from listening to management and labor discuss their problems, it was this: The carriers face a tremendous challenge in holding public acceptance for their position in the face of stepped-up union counter-activity — particularly at the local level.

But labor, too, has a problem in promoting activity locally. Item: I talked with one top carrier personnel officer at Highland Park who thinks that union propaganda "hasn't fooled the employees. They know featherbedding exists." Item 2: On a basis of material presented, the Railroad Public Relations Association conferees came away better prepared to talk up the rules issue than did the brothers at Iowa City.

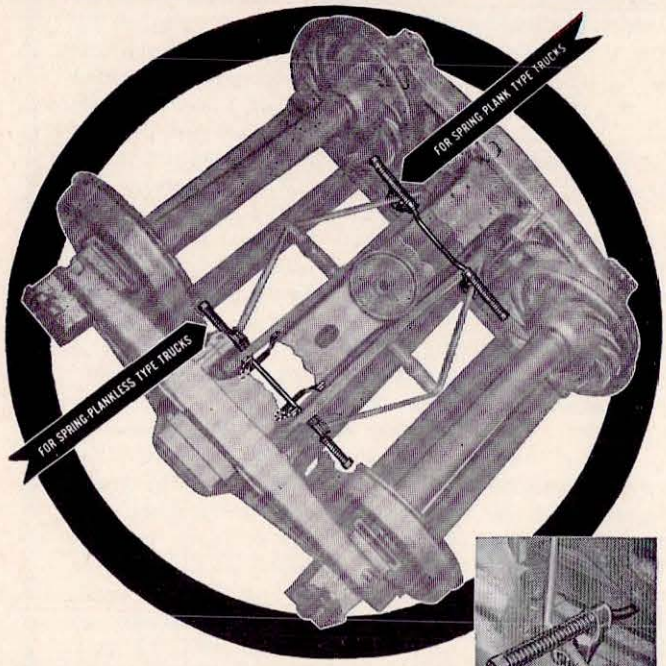
Ops at the local and general chairman level don't seem intolerably worried by the rules situation as it stands. They're annoyed by National Railroad Adjustment Board affairs. They're concerned about the effect of Landrum-Griffin on their own responsibilities. But wages? One fireman put it this way: "Oh, we'll get whatever the Engineers get. We know that. It's happened before, it'll happen again." And rules? Well, big steel's capitulation on the rules issue was a morale booster for the rank-and-file (for those who really care, and the boys tell of some who would trade rule rights for a few cents increase in basic rates). Moreover, there's some tendency to dump the rules fight in the lap of the grand lodge—although brotherhood officers are hard at work to convince the members of the value of grass roots effort on the rules issue.

At both the RPRA seminar and the BLE-BLF&E-BRT-ORC&B-SUNA institute there were vigorous discussions of "why public relations?" Why, in view of the relative insulation separating emergency board members from direct public responsibility, should public opinion count for so much? Particularly, why should so much effort go into development of a public understanding, when certain of the brotherhoods have often refused to settle on emergency board recommendations unless a bit more sweetening was added?

And the answer, of course, lies again at the local level (primarily) in the power of public opinion to sap the will to resist. It's the same sort of grass roots opinion which can mould a course of action in Congress — in the event crisis should precipitate legislation.

It's significant that although the brothers applauded Secretary Mitchell's plea for both sides to quit fighting in public, they came back next day with a discussion of public opinion and membership communication. The BLF&E's Ed Gilbert (moderating the panel) and the AAR reached a measure of agreement on the issue. Said Mr. Gilbert: "What affects railroads affects the entire country and. . . is of particular interest to most citizens." Said the AAR: "It (the work rules issue) is. . . too vital to the public interest to shut off an open discussion." —*Gus Welty*

THE IMPROVED GRIPCO
BRAKE BEAM SAFETY SUPPORT

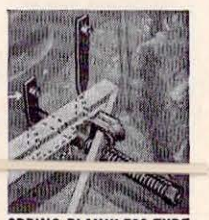


SPRING-PLANK TYPE

The Gripco Brake Beam Safety Support provides the greatest safety at lowest cost. Its dependability has been proven over years of actual service. Gripco Safety Supports are low in original cost, low in application cost and low in maintenance cost, even after years of service.

ENGINEERING IMPROVEMENTS

1. One design fits both 5'-6" and 5'-8" wheel base trucks.
2. One rod length and one spring length. One interchangeable casting fits both spring plank and spring plankless trucks.
3. Ideal for interchange repairs. New design permits easy and fast applications under all conditions. Nuts need not be removed to apply or remove the support.



SPRING-PLANKLESS TYPE
(Safety Loops Included)

OUTSTANDING FEATURES

1. An inexpensive trouble-free support for Rebuilt Car Programs.
2. Designed for spring plank and spring plankless trucks. Spring plankless trucks require safety loops which can be bolted, riveted or welded to the bolster.
3. Supports the brake beam in the event of brake beam or hanger failure.
4. Holds brake beam in horizontal position.
5. Holds brake shoe in proper position in relation to the periphery of the wheel.
6. The brake release feature pulls brake shoes away from wheel contact instantly when brakes are released.
7. Prevents unnecessary wheel and shoe wear caused by dragging brake shoes.
8. GRIPCO supports can be removed and reapplied without removing nuts; therefore nuts are furnished in proper position.
9. Brake beams, rods, and levers are held in position under spring tension thus reducing false movements, chattering and wear of hangers, hanger pins and brake heads.
10. Can replace as a billable repair any support except A.A.R. recommended practice (angle-riveted and welded).

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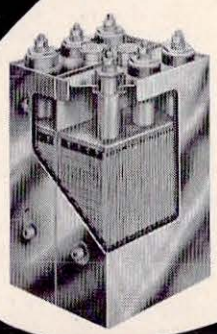

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NICAD
TRADEMARK

NICKEL CADMIUM ALKALINE STORAGE BATTERIES

MOVIES HELP YOUR SALES

(*Continued from page 15*)

train service employees on use of train radio.

- Made time and motion studies on installation of journal stops and on wheel change-out.
- Produced 35mm color slides for the Frisco hospital.
- Done black-and-white color aerial work to illustrate industrial growth and available on-line industrial sites.
- Produced, for industrial engineering, films on the road's tie plant and diesel shop at Springfield, Mo.

Film and audio-visual bureau chiefs on other major roads can point to equal versatility in the jobs they handle and the departments they serve.

Santa Fe, for example, recently released a 16mm color-sound film "All the Way"—a graphic presentation of many major services which the road offers shippers. Sales promotion of this type is a major objective of the department's production work—but Santa Fe has also been active in public service and employee training-motivation film work.

About 65 films have been produced in the public service field since the film program was started before World War II (and last year Santa Fe public service films were shown to a non-TV audience of about 3,500,000 persons). Loss and damage prevention and safety have received major attention in the employee training field—and Santa Fe's advertising department has become skilled in production of slide films for freight loss and damage prevention, safety, traffic and industrial meetings.

Union Pacific has long been strong in film work—particularly in the areas of passenger travel promotion and agricultural motion pictures. The territory served and the service provided give UP (like Burlington and a number of other western lines) a ready-made jumping off point for passenger films. And the same is generally true of agricultural work. UP's 14 agricultural films last year set a new record: 2,025,234 persons saw the motion pictures in more than 27,000 general showings. In addition, 159 TV showings were made to an audience estimated at almost 34,000,000.

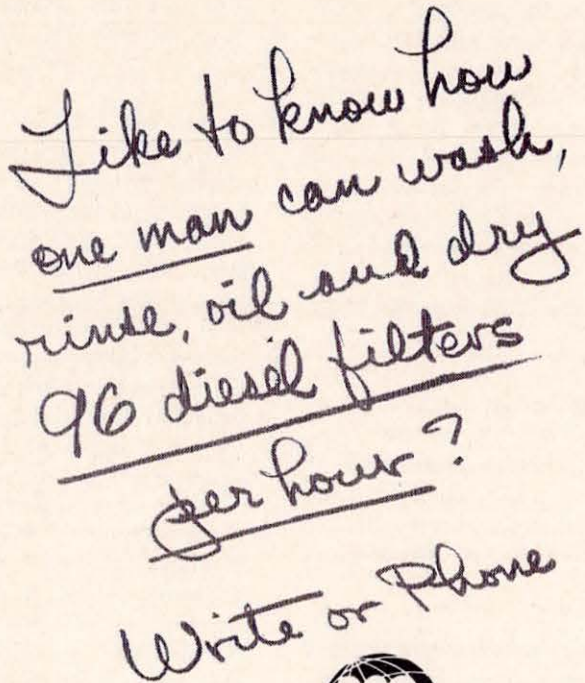
Industry associations are also moving in the direction of film presentation of ideas and principles. The Illinois Railroad Association recently completed a color-sound motion picture showing the job railroads do for the people of Illinois and the handicaps that work against doing an even better job. Association officers think they have an excellent local-level public relations tool. They're handling distribution through a commercial service and are urging member roads to sponsor purchase of more prints for the pool.

Perhaps this comment from one road's photo department keys the expected growth of audio-visual work:

"I believe management is becoming increasingly aware of the motion picture and audio-visual materials as excellent communications tools for the general public and employees—and, if we desire, for stockholders and directors.

"The usual method of approach when we communicate ideas or differences of opinion is to let the facts speak for themselves, by printing them in a letter or brochure. This method offers the easiest and cheapest solution to a communications problem—but there are many people who are more prone to think in the language of emotion rather than of cold logic. Here lies the advantage of film and audio-visual material over other media.

"The motion picture, slide film, recording and the rest—because of their scope in both picture and sound—can more readily dramatize an emotion . . . This is a case for audio-visual presentation."



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CHEMICAL COMPANY INC.

RAILROAD DIVISION
Garwood, N. J.
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You Ought To Know...

"For Sale: One Passenger Car Factory." Interested buyers contact Pullman-Standard. The 50-year-old Osgood Bradley plant at Worcester, Mass., acquired by P-S in 1930, is on the block. Completely modernized in 1946, the plant has been on a stand-by basis for over a year. Faced with a dwindling passenger car market P-S has decided to close up shop in Worcester.

Western Pacific has reached a compromise agreement with the Internal Revenue Service on two pending income tax claims. A 1952 claim stemmed from bond interest paid under a 1944 Plan of Reorganization. The second claim was asserted in 1955 over losses sustained by a wholly-owned subsidiary. The settlement increased WP's working capital by $3,456,000.

Urban and suburban transit problems and solutions will be discussed at a seminar April 26-28 at the Knickerbocker Hotel in Chicago under sponsorship of the Railway Systems & Procedures Association.

First passenger increase since 1953 was recorded last year by the Long Island, the nation's busiest passenger railroad. The increase was from 73.6 million passengers in 1958 to 73.9 million in 1959.

New York's subway-car situation is "serious enough to require drastic action," the Transit Authority has told Mayor Robert Wagner. New financing plans must be worked out "if funds for new cars cannot be found through the usual methods," said the Authority. The comment was made following a Coverdale-Colpitts survey that found the subway system safe but antiquated.

Sale of 41 miles of Lehigh & New England road to Jersey Central Lines has been approved by directors of the two companies. ICC approval will be required to consummate the agreement. Lines the JCL wants are concentrated in the cement and anthracite coal regions of Pennsylvania plus the cities of Allentown and Bethlehem. As for the remaining 129 miles of road, "We are in no position to say at this juncture what will eventually be done," said C. Millard Dodson, chairman of Lehigh Coal & Navigation Co., the L&NE's parent company.

A proposed merger of Pacific Intermountain Express and U. S. Leasing Co. has been dropped, apparently because of inability to reach agreement on a basis for exchange of stock. Under a plan tentatively approved, the merger would have been carried out through formation of a new company.

With new low rates in effect April 9, both C&NW and Soo Line have started moving iron ore off the Gogebic Range—C&NW to Escanaba, Mich., and Soo Line to Ashland, Wis. North Western, which also moves Menominee Range ore over the Escanaba dock, had hauled 35,000 tons of Gogebic ore to the port through April 11, and expected boat loading operations to begin later in the week. Soo Line, preparing for arrival of the first ore boat April 16, expected to move about 625 carloads into Ashland last week. Soo said the movement shows that Ashland and the railroad are "very much in the ore business . . . despite rate adjustments designed to alter historic traffic patterns."

A new all-transistorized solid-state electronic computer is being readied for installation in Santa Fe's general office building at Topeka, Kan. Testing has begun on necessary programming to direct the new 7070 computer which will receive data from electronic devices in key cities throughout the Santa Fe system.

London-to-Moscow through train service is scheduled to start May 29. Round-trip fare (including sleeper) will be around $196.

Milwaukee Road Flexi-Van equipment continues to turn in impressive mileage records. Against a box car average of 18,000 miles per year, F-V flats are moving at a rate of 80,000 miles—and cars in mail service between Chicago and Wisconsin-Minnesota points are clipping off miles at a rate of 101,000 per year.

Last steam locomotive to be built by British Railways came off the line last month. BR now has 14,231 steam locomotives, 484 main line diesels, 1,405 diesel switchers and 90 electric engines. By 1963 BR expects to have 2,300 main line diesels, 2,000 diesel switchers, 200 electric locomotives, and only 7,000 steam locomotives in service.

Tugboat dieselization has been completed by the Pennsylvania. Last of PRR's coal-fired tugs in New York Harbor were retired with delivery of seven new diesel-drive tugboats that cost $3,000,000.

Dissatisfaction with the Department of Commerce transportation report (RA, March 21, p. 31) has caused Seatrain President John L. Weller to resign from the department's Transportation Council. He said the report "demonstrates the same bias toward the political objectives of the would-be monopolists in the railroad industry which characterized the unlamented Weeks Report."

"The 100 Greatest Advertisements" (second revised edition, Dover Publications, New York, $2.25) includes five celebrated railroad ads: Lackawanna's "Phoebe Snow" (extolling the virtues of the Road of Anthracite); Boston & Maine's "That's a H—l of a Way to Run a Railroad!" (a candid explanation of bad weather delays); New Haven's "The Kid in Upper 3" (a tribute to the World War II soldier—"our most honored guest"); Chesapeake & Ohio's "A Hog Can Cross the Country Without Changing Trains—But You Can't!"; and Southern Pacific's "A Short Course in Railroading—for Airline Executives" (correcting airline claims that it's cheaper to travel by air than by rail).

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Diversify . . . or Stagnate

There was a full-page advertisement in the Wall Street Journal the other day by the Dayton Rubber Company, which has changed its name to the Dayco Corporation. The advertisement explained the reason for the new name as follows (in part):

"Time was when the one-field company was the most evident form of organization in industry. Today, it is rapidly falling into the limbo of outmoded things. Diversification has become a basic principle of sound modern management.

"From a maker of fruit jar rings and garden hose, we have grown into something more than a rubber company. Today we market literally thousands of products for home, business and industry."

The principal railway equipment and supply concerns have already diversified their products. A recent issue of Printer's Ink magazine reported on the degree to which diversification of products has become a major trend, energetically pursued by most progressive industries. A camera manufacturer has expanded into aviation and missile equipment. A materials handling firm has invaded the field of hydraulic pumps. A tobacco manufacturer has gone into the candy business, on the side.

In a recent address, A. G. Anderson, head of Socony Mobil's traffic department and a customer of all types of transportation, emphasized the public interest in authorizing and encouraging railroads to provide service by methods of movement other than rail.

There is no one informed about transportation who does not believe that closer collaboration and traffic interchange among the several types of transportation is urgently needed in the public interest. But there are those who believe, or pretend to believe, that effective "integration" can be obtained by the through routing of traffic, and that common ownership of several kinds of transportation is not necessary or desirable. These defenders of limitations on railroad progress overlook the fact that a "department store of transportation," providing movement by all methods in combination, would give a variety and quality of transportation service that would be something entirely new for the shipping public. And department store transportation would no more put "specialty shop" transportation out of business than retail department stores have put haberdashery shops out of business.

Railroads must keep pace with the times by diversifying their operations. They need to do so in the interest of their patrons, and in that of their employees and owners—as well as in the national interest. Their customers want them to expand, in the interest of improved and more economical service. Only their competitors—enjoying a politically protected monopoly—object.

Is Mr. Laney Out of Step?

We can understand—even though we cannot share—the impatience of Chief Guy Brown with Local Chairman Laney of the BLE at Birmingham, who spoke out of turn on the "fireman off" issue (RA, April 11, p. 9).

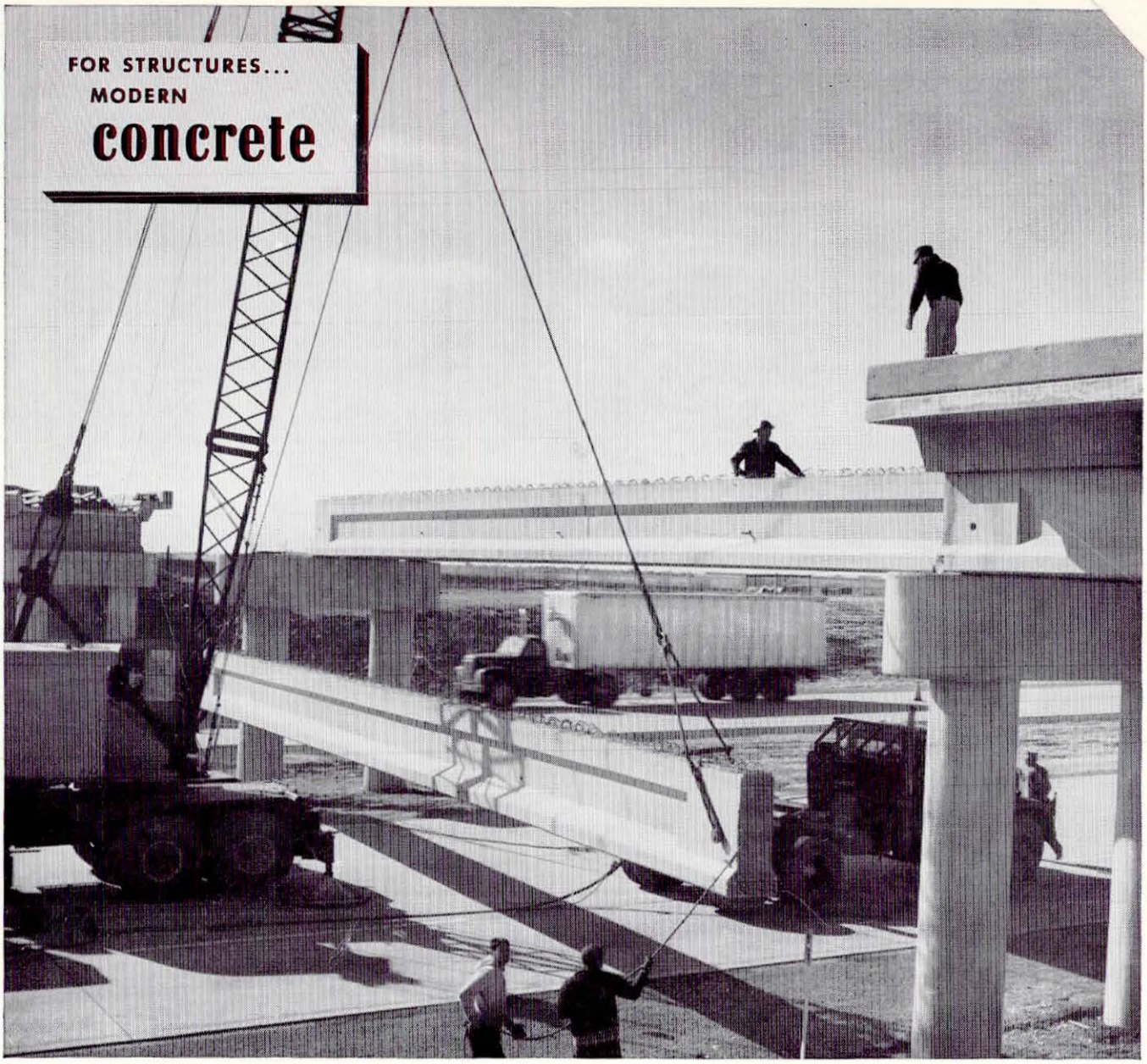
Mr. Laney expressed the view that "fireman off" should be accepted, as a long-range program—with present employees protected in their jobs, allowing the jobs to fade away by attrition. This is the agreement arrived at in Canada. It would not help much in insuring the future of a union of locomotive firemen, but it would avoid any hardship whatever to individual firemen.

It appears that Mr. Laney is to be punished for speaking his mind—since generals are seldom inclined to encourage efforts by their subordinates to make a "separate peace" with the opposition.

The fact remains, however, that Mr. Laney's attitude toward restrictive working rules is neither surprising nor unusual, among railroad union men. Thousands of them, we have reason to believe, share Mr. Laney's point of view. Even Chief Brown himself has come close to saying much the same thing, although not in such specific language.

The prevalence of understanding on the part of many railroaders in the ranks, of the harmful effect of restrictive working rules, affords strong justification for the temperate tone of management's representatives in discussing these rules.

Persistent good will toward individual employees—coupled with relentless insistence that uneconomic restrictions be terminated—can work both railroads and unions out of their present mutual jeopardy. Retention of present rules is little short of suicide for employees and employers alike.



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Great Southwest is one more modern railroad turning to concrete for construction economy, durability and more efficient operation.

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